



THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment, and Administration of Hospitals, Sanatoriums, and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XVIII

February 1922

No. 2

THE SEARCH FOR THE IDEAL IN HOSPITAL ORGANIZATION*

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SIR Thomas More, the celebrated statesman and author, who added so much luster to the reign of Henry VIII, was struck by the fact that there was something about the hospitals of England in the early part of the sixteenth century that made men shun them, and in his famous *Utopia* he set forth the characteristics of an ideal hospital in a manner which has not been surpassed by any writer on hospitals, lay or professional, in the 400 years that have since elapsed. In the perfect state which More's fertile imagination evoked, the people had a tender regard for their sick:

"They take more care of their sick than of any others; these are lodged and provided for in public hospitals. They have belonging to every town four hospitals that are built without their walls and are so large that they may pass for little towns; by this means, if they had ever such a number of sick persons, they could lodge them conveniently and at such a distance that such of them as are sick of infectious diseases may be kept so far from the rest that there can be no danger of contagion. The hospitals are furnished

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and stored with all things that are convenient for the ease and recovery of the sick; and those that are put in them are looked after with such tender and watchful care and are so constantly attended by their skillful physicians that, as none of them is sent to them against their will, so there is scarce one in a whole town that, if he should fall ill, would not choose rather to go thither than lie sick at home."

With the best of good-will concentrated on hospitals in countries the most advanced in the arts of civilization, it has taken centuries of unflagging effort to lift hospitals to a position of safety and desirability. It was still a question, sixty years ago, whether the establishment of a hospital in such countries as England and France was an event fraught with good or evil, and hence we find Florence Nightingale beginning the preface to the third edition of her *Notes on Hospitals* published in 1863, in these words: "It may seem a strange principle to enumerate as the very first requirement in a hospital that it should do the sick no harm. It is quite necessary, nevertheless, to lay down such a principle because the actual mortality in hospitals, especially in those of large crowded cities, is very much higher than

*An address delivered at the Medical Conference at the Peking Union Medical College, September 20, 1921.

any calculation founded on the mortality of the same class of diseases among patients treated out of hospitals would lead us to expect."

If we may assume that hospital conditions in the United States during this period were not materially different from those prevailing in England, evidence of progress during the thirty years following the publication of Florence Nightingale's book may be found in the transactions of the National Congress of Charities held at Chicago in 1895; for it was upon that occasion that Richard Wood, a trustee of the Hospital of the University of Pennsylvania, remarked that there was still "among the uninstructed, a horror of the hospital," which Mr. Wood attributed to the fact that "the ignorant imagine the sick to be at the risk of untried remedies, and to be the subject of experiment, because poor and treated freely." But to Mr. Wood himself, and to the social and intellectual class to which he belonged, the hospital in 1895 had ceased to be a thing of terror, and had become "a tree of life, the leaves whereof are for the healing of the nations."

In our own day the good accomplished by hospitals is not a subject of dispute; nevertheless, the precise place that the hospital should occupy in the body politic, the proper seat of responsibility for its existence and for its work, and the principles of its organization and administration remain fruitful subjects of investigation and debate. As an introduction to the consideration of means by which the usefulness of hospitals may be enhanced, let us review briefly some of the principal administrative objectives of recent times.

About twenty years ago there sprang up in the United States an association of hospital superintendents, the first organization in the western hemisphere of men whose efforts were devoted to the improvement of hospital conditions. The declared object of the association was the promotion of economy and efficiency in hospital administration. A review of the earlier transactions of this association shows that the hospital superintendents of America were at that time concerned chiefly with the care of buildings and the economical purchase and distribution of supplies. Hospital management was by them conceived to be scarcely more than a form of household administration.

How strikingly this point of view contrasts with that of the progressive executive of the present day, who, without relinquishing his interest in the problems of internal institutional management, is concerned lest the hospital fail to measure up to the health needs of the community. To define the relation of the hospital to the community is today accepted as the essential theo-

retical problem of hospital administration; to fit the organization of the hospital for the performance of its duties as thus defined, as its fundamental practical problem.

If the symptomatic treatment of disease in the individual no longer satisfies the scientific clinician, the mere sheltering of the sick in order that such treatment may be administered no longer satisfies the thoughtful hospital administrator, who seeks to bring organized medical practice under the influence of the latest and most approved scientific conceptions of disease. The path of scientific medicine proceeds through the several branches of pathology to causation and prevention, and it is along this path that organized medicine, represented chiefly by the hospital, is advancing. Numerous surveys undertaken by American communities in recent years clearly indicate this trend. The object of such surveys is to determine the character and the incidence of existing disease and to disclose relevant environmental factors, and on this broad basis to define hospital function and to formulate hospital program. The logical result can be nothing less than an attempt to levy upon and skillfully to organize all the available resources of society for the prevention and cure of disease.

That in one of its aspects hospital administration is a branch of domestic administration need not be denied, but orderly household arrangement is today regarded as the least of hospital problems. The hospital has become conscious of its duty as a center for medical research in preventive as well as in clinical medicine, as an instrument for the training of physicians and nurses, as a school where the laws of health may be imparted to the laity, and even as an avenue by which statesmen may be led to perceive the danger of any social or industrial system which disregards the health of the people.

John Morley in his "Life of Voltaire" tells of Voltaire's youthful intellectual limitations under the narrowing influence of social life at the court of France; he describes Voltaire's escape into England and indicates the enlightenment which resulted from Voltaire's challenging and stimulating contact with a free people and their institutions. When Voltaire returned to France, says Morley, he "had tasted of the fruit of the tree of scientific reasoning and had become alive to the central idea of the social destination of all art and of all knowledge." Intellectual and social influences no less potent than those which influenced Voltaire's later career have recently been at work to widen the horizon of the hospital administrator and to reveal to him the social character and destination of the institution over which he presides.

The three great types of hospitals in the modern world are the public hospital, managed by public officials and supported wholly by public funds; the private non-sectarian hospital; and the sectarian hospital, likewise under private control. Each of these types has distinctive characteristics, but all reflect in greater or less degree the scientific, social, and economic standards of the period.

The private or voluntary hospital, upon which the people of England pride themselves as peculiarly an English institution, is dominated by the belief that bureaucracy, with all that the term implies of the inflexible and un pitying application of rules, lack of initiative, and loss of spontaneity, is the worst of all possible influences in a humane institution, and the last of all possible forms of control which should be tolerated by free men. The English system, transplanted in America and in the British Colonies, has flowered vigorously, but neither in the overseas dominions of Britain nor in the United States has there been such uncompromising insistence as in England on absolute freedom from all subordination to or official relationship with government authority.

Generously supported by voluntary contributions, while neighboring rate-supported or state hospitals were receiving insufficient doles from the public treasury; free to experiment with both construction and organization, while public hospitals were fettered by official restrictions; so situated as to be able to take a leading part in medical and nursing education; giving generously to the poor and deservedly applauded as an expression of the more kindly qualities of the Anglo-Saxon race; limited in size and therefore free from the evils of machine-like administration which cling so tenaciously to great institutions, the voluntary hospitals of England were long regarded as the supreme charitable effort of modern society at its best. Nevertheless, the English voluntary hospitals, compared with voluntary hospitals in other parts of the English-speaking world, have seemed to some to be mistaken in their refusal to utilize any of their facilities for the treatment of the well-to-do, as well as in their uncompromising determination to steer clear of official control. The traditional English policy has apparently delayed the day of hospital coordination, without which a comprehensive community program for the conservation of health cannot be achieved. Just now some of the hospitals of England seem disposed to reshape their program so as to provide service for social classes heretofore excluded from their benefits. A drift of policy is likewise discernible in Great Britain in the direction of partial state support.

In the United States voluntary hospitals have

been widely developed along sectarian lines. The religious instinct, often suppressed under the stresses of modern economic life, is apt to reassert itself when illness appears. The sufferer who is racked in body and mind finds peace most readily among fellow-believers. Eager to render service, the churches of America have vied with each other in the endowment of sectarian hospitals where service is offered alike to rich and poor, and where tender nursing care and a sympathetic religious atmosphere are often regarded as of greater worth than mere efficient business organization or even, may I say, than accuracy in diagnosis.

State vs. Voluntary Hospitals

In the types of hospitals which we have just been considering, ideals of freedom, sympathy, and religion determine to a great extent the general character of the hospital, and fix the nature of the controlling authority; but there are countries where these motives do not freely operate, sometimes because the underlying human instinct is not sufficiently developed, sometimes because means are lacking, and again on account of political conditions. In the latter connection, one thinks of continental European countries where organized medical service, originally almost wholly an affair of the church, has become an accepted function of the state. Even in those parts of the world where the voluntary hospital, sectarian or non-sectarian, has flowered most luxuriantly, the insufficiency of available private funds, the tendency of voluntary hospitals to focus their attention on certain classes of the sick to the exclusion of others equally deserving, and the imperious demands of social hygiene, have caused the state to set up public hospitals for the purpose of filling gaps in the voluntary system.

There are two respects in which the state hospital occupies a position entirely distinct from that of the voluntary hospital; the first is its acceptance of the responsibility of society as a whole (in contradistinction to that of sectarian or other groups) for medical relief; the second is its support, at least potentially, by all the resources of the state. There is no limit to the share of its wealth that the state may devote to the protection of the health of its citizens, and there is no social or invalid class which may logically be excluded from the benefits of a state medical service, once instituted. The principle of state responsibility for the care of the sick having once been accepted, the extent of its application becomes simply a question of expediency. In its narrowest application, state medical service is limited to the care of persons suffering from communicable disease, and here the dominant motive is the protection of

society, rather than the care of the sick; in its widest application, it includes not only every useful variety of hospital, but, reaching out beyond the walls of the hospital, it seeks to provide medical treatment in the school, in the workshop and wherever such treatment may be required, even to the extent of providing constant oversight of the health of citizens, in all the circumstances of life, from infancy to old age.

Specialization of Labor

While the progress of a hospital toward efficiency may be accelerated or retarded by its status as a public or a private institution, social, scientific, and economic forces play upon all types of hospitals without regard to their official relations. Perhaps the greatest single factor in modern hospital development has been the specialization of labor, a process which may be observed both in the medical branches and in general hospital administration. The intensive cultivation of limited areas of thought and action is a phenomenon characteristic of our age. It has left its impress on all the sciences and on most of the arts, but in medicine its first strong impulse has now been expended, and the period of differentiation, which tended to separate medical practitioners into many classes, has been followed by an irresistible demand for the coordination of the efforts of the different types of practitioners. Thus we have arrived at so-called "group medicine."

In the earlier days of specialization, specialists in New York and elsewhere sought to acquire the facilities necessary for the free development of their art through the establishment of independent hospitals of limited scope. They were forced to do this by the refusal of the departments of general medicine and surgery to yield ground to them. For a time the internist and the general surgeon were able to maintain their opposition to clinical innovations. But the specialists, working in hospitals of their own, outside of the general hospitals, progressed rapidly in the development of an invaluable technic, and it was not long before the need of their services began to be felt in the general hospitals; at this time consulting specialists were added to the regular hospital staffs. These consultants were at first simply called in occasionally to assist in diagnosis and treatment, but in the course of time the hospitals perceived the advisability of providing separate wards together with suitably equipped treatment rooms and laboratories for the special clinical branches; and thus the departmentalized hospital emerged. The change that we have just outlined was most quickly effected in hospitals which were affiliated with medical schools, for it was in such institutions that the need of varied and compre-

hensive clinical facilities was first experienced.

One of the things that stimulated the development of hospitals made up of a number of medical departments, combined and coordinated in such a manner as to permit of concerted clinical effort, was a growing appreciation of the fact that, indispensable as may be the specialists' contribution to the welfare of the hospital patient, it is prudent not to regard this service as self-sufficient or final, but wise rather to estimate it as a link in the chain of cooperative clinical relief. The time is approaching when the specialist will not be willing to treat most of his patients unaided, and when public opinion will decline to sanction such treatment, even if the specialist be willing.

Disregarding for the moment the personal equation, and considering merely the question of method, one may today with reasonable accuracy appraise the clinical efficiency of a hospital by ascertaining the number of separate departments which contribute to diagnosis and treatment. If it is not always true that sound practice prevails where team work flourishes, at least we may say that the opportunities for effective medical work are greatest where team work is highly prized. Broadly speaking, then, it may be said that a notable advance has been made toward hospital efficiency, first, by the training of special types of practitioners, and then by the coordination of the activities of the several skilled groups.

Advance in Laboratory Medicine

While the clinical development of the hospital was proceeding along these lines, laboratory medicine was following a parallel route. The single pathologist who, thirty or forty years ago, was able without an effort to satisfy all of the scientific demands of his clinical associates, has been replaced by a numerous laboratory staff, each member of which finds plenty of work to do in his chosen specialty, whether it be tissue pathology, bacteriology, pharmacology, serology, radiology, or cardiology, but in this field also the attempt to achieve perfection by intensive specialization has been followed by a growing appreciation of the dangers of isolation and by a demand for a close working arrangement between the laboratory and clinical groups.

The successive phases of laboratory development are reflected by the manner in which hospitals have planned and erected their laboratories. A historical study of hospital plans tells the whole story. Beginning in 1870, when hospitals were frequently planned without laboratories of any kind, one finds in succession the following laboratory types: a single, rather small room; a small pathological laboratory combine with the morgue;

a larger laboratory, equipped for pathology and bacteriology, still combined with the morgue; suites of rooms in the arrangement of which chemistry finds a well recognized place but which, despite a growing intimacy with the clinical departments, continue to be located in basements or in other remote places; differentiation of the general from the clinical laboratory, the latter becoming an important annex to the ward; and finally, a stage in which the intimate collaboration of the laboratory and clinical divisions of the hospital is recognized and promoted by the grouping of the wards and the out-patient department about a central building which contains a great variety of laboratories—which contain, in fact, all that the hospital is able to afford in the way of specialized diagnostic and therapeutic equipment.

Automatic Retirement of Physicians

About thirty years ago, a feeling of restlessness swept over the hospitals of the United States and Canada. Under the leadership of a few men of genius, magnificent work was being accomplished in one or two centers, and a standard of achievement was thus set up which stirred others to action, prompting widespread reorganization. But how to proceed was a problem, for in many instances, when a new scheme of organization was proposed, it became apparent that the key positions in the clinical organization of the hospital were held by men not abreast of the times, and that no matter how the organization might be changed on paper, the result was likely to be the reinstatement of some of these influential men in positions directly athwart the path of progress.

In this situation the conviction grew that youth with its modern training would save the day, and in order to create positions for young men of promise, a plan was widely adopted for the automatic retirement of the incumbents of clinical positions upon reaching a certain age, or upon the completion of a definite term of service. America was at least thirty years behind England in resorting to this expedient. French sympathy with the idea that men of mature years involuntarily impede progress is somewhat touchingly expressed by Duclaux, who, recounting in his study of Pasteur the difficulty experienced in obtaining among medical practitioners a hearing for advanced biological conceptions, says: "Physicians are those I would wish to lay hold of, and I begin to fear that I shall not succeed. I know very well that old physicians do not read any more, and that when they do read, do not understand."

Although, here and there, a useful hospital ca-

reer has perhaps been cut short by the policy of systematically replacing older with younger men, the net result has doubtless been advantageous to progress; but so simple a rule of procedure does not and cannot of itself invariably bring about an ideal hospital organization. Let one clinician be replaced by another, and if both have the same outlook on life, even though one be old and the other young, the same stagnation will result. How to insure perpetual progress is the problem.

Teaching Hospitals More Useful

Is the problem automatically solved when teaching is introduced? Is teaching the magic word? I need but recapitulate the familiar arguments in its favor. To the teacher, surrounded by the eager and inquiring minds of youthful students, is given a sure and constant incentive to discover and rediscover truth. The mind of the teacher is perpetually refreshed. The conscientious and well-endowed teacher can hardly fail to become observer, thinker, questioner, discoverer, leader. To him is given the opportunity through his influence upon the minds of his students to project himself indefinitely into the future. In the atmosphere of the school research is born, and research is the key to the hidden secrets of nature. Thus the greater usefulness of the teaching hospital is apparent. But all teaching hospitals are not alike in their organization; standards are lacking, and appear to be needed. We arrive then at the question of hospital standardization.

Can a type of organization, a method of hospital administration, be prescribed which is suitable for all places and all times? It may be useful to formulate the principles of hospital function and organization, but to define in exact terms the character of the organization and to limit the activities of the hospital within the terms of the definition is to obstruct progress. Standardization so conceived is a more pernicious influence than state control or bureaucracy, for a bureaucrat may change his mind, while the written word is inflexible. Nevertheless, standardization becomes a useful instrument when understood simply as a means of upholding minimum standards.

The standardization of hospital work is no novelty. Standards exist wherever the state through legislation has defined the conditions under which medicine or nursing may be practiced in a hospital. The formation of voluntary organizations for the promotion of standards beyond those thus prescribed by the state is an indication that there exists a professional or popular demand for safeguards not yet demanded by the authorities. Such a movement, expressing high ideals, stamps as

sub-standard the hospital which does no more than conform to the modest requirements of the law.

In a large country, where educational and social conditions are not uniform, the highest standards cannot be widely established or uniformly maintained either by law or by voluntary associations, but a conscientious effort to determine and define those things which are the indispensable attributes of honest scientific work—for example, accurate records of clinical and laboratory observations—may be extremely useful. Standardization thus conceived encourages inspection and publicity, and keeps alive a sense of responsibility; it promotes a healthy rivalry among hospitals, and generates a demand for better things.

Flexibility in Hospital Planning

The consideration of the basic principles of hospital planning is relevant to the present discussion; for while anywhere and under any physical conditions the competent and resourceful physician will find a means of helping his patient, a hospital in which many physicians are employed cannot function smoothly in the absence of a sound physical basis for its operation. The plan of a hospital suggests and to a certain extent influences its development, its organization, and its methods of work. Serious attempts have been made to insure perfection in hospital organization by means of hospital planning, but it is evident that the physical arrangement of a hospital which is planned and erected at a given moment in the history of medicine can do no more than meet the requirements of that moment. The hospital which is complete today is inadequate tomorrow. The most that can be done in the planning of a hospital is to satisfy, after careful inquiry, all the demands of the period. A constant need of all hospitals at all periods is the need of change, and the most important single principle in hospital planning is undoubtedly the principle of flexibility. Other important principles of planning are unity, diversity, hygiene, and economy, to each of which brief attention is due.

Modern medical treatment involves a wide variety of diagnostic, therapeutic, and nursing procedures, and an elaborate domestic economy. A well ordered hospital necessarily contains many clinical and other subdivisions; the specialized character of these subdivisions readily suggests the splitting of the hospital into many parts, and hence the architect is apt to be led away from the fundamental idea that the hospital is an organic unit, which cannot function vigorously unless all of its departments work in harmony; but upon the due recognition of the principle of unity

the successful operation of the hospital largely depends.

A glance at hospital activities at once discloses many diverse functions. Certain principles of arrangement are valid, respectively, for particular departments of a hospital. If the architect considers separately each distinctive function and plans for it appropriately a variety of structural outlines will emerge. If he then proceeds to build for each function, regardless of its place in the general scheme, chaos will result. While the value of diverse forms must be recognized, the necessity of combining these forms into a practicable unit must not be overlooked. On the other hand, if a plan is adopted which is too simple and which is selected on account of its correspondence to some particular hospital function, the resulting building may be satisfactory in part but will not give satisfaction as a whole.

Must Build for the Future

A hospital building in which the qualities of unity and diversity have been happily blended may be a perfect instrument at the time of its completion, but, as I have already said, unless a certain measure of flexibility is added, the building will not long serve as a perfect instrument. Social changes, community growth, scientific discovery, create new demands, which every hospital is called upon to meet. Healthy hospitals are growing hospitals. New discoveries are constantly opening up new lines of medical treatment which call for additional space-consuming therapeutic apparatus. Nursing standards and the methods of recording work done are forever advancing. A hospital which begins as a medical boarding house is eventually called upon to participate in health education, in teaching, in scientific research. Pressure is constant, both from within and from without, and the hospital must be in a position to accommodate itself to every new and reasonable demand.

Hygiene is one of the most vital of all principles in hospital planning; a hospital which is not rich in health values is a failure. Health values in hospital construction do not reside exclusively in smooth walls, smooth floors, and rounded inner corners, but include certain features or characteristics which tend directly to the promotion of health, such as the proper orientation of wards, the sun exposure of balconies, roofs or other outdoor space accessible to patients, effective ventilation, quiet bedrooms for night nurses, proper dormitories and recreation rooms for all resident officers and employees, a cheerful and tonic general outlook; and also features which aid in the prevention of disease, such as receiving wards, quiet rooms, isolation wards, steriliz-

ing equipment of many kinds, and sanitary construction.

It is a mistake to consider building cost apart from maintenance cost. Broadly speaking, economy of use is more important than economy of production. A concentrated institution is cheapest to build and to operate, but in our discussion of the diversity of hospital function we saw that extreme concentration and simplicity of design ultimately defeat their own ends. An economical hospital is one in which every cubic foot of construction gives maximum prolonged service.

Some Principles of Hospital Planning

Systematic consideration of the details of hospital planning would be somewhat out of place in the present discussion, but I may at least be permitted to emphasize how indispensable to efficient work are wards in the planning and arrangement of which due consideration has been given to the personal comfort and the privacy of patients, to the requirements of case grouping for purposes of study, to the value in certain disease conditions and in most climates of treatment out of doors, to the need of suitable examining and treatment rooms, to the installation and placing of the apparatus which modern nursing service demands. Outside of the wards, apart from the always present and indispensable kitchen and laundry, the heating, lighting, and power plant, and the business offices, departments which on account of their intimate relation to the clinical and scientific functions of the hospital and to staff efficiency call for the most careful consideration in hospital planning, are the admitting and social service departments, the outpatient department, the diagnostic and research laboratories, various therapeutic departments, diet kitchens, record rooms, library, teaching rooms, and residential quarters for doctors, nurses and others.

Lack of time forbids any attempt to examine at length the details of the medical, nursing, and business administration of the hospital, but I wish to record my conviction that in the field of acute diseases the general hospital in which the clinical specialties are combined, and in which alone a proper coordination of effort can be secured, is preferable to a loose aggregation of independent institutes which favor isolation and which afford no automatic corrective for the mental habitudes of the specialist. That in-patient and out-patient services are best conducted under single control and with the members of the same staff functioning in both departments, and that it is contrary to the best interests of physicians, of patients, and of society, to establish hospitals for the exclusive benefit of either rich or poor.

Teaching is not a function of the university hospital alone. Hospital staffs everywhere should cultivate the teaching habit, and their efforts to do so will be richly rewarded by public and professional recognition and by enhanced usefulness. It is with feelings of mingled admiration and pity that one contemplates a hospital which ministers successfully to its patients and to its patients alone—admiration for its beneficent work and pity for its failure to make its work count to the advantage of all of the sick in the locality, a result which can readily be won by encouraging physicians not identified with the staff to use the laboratory facilities of the hospital, to consult its library, to visit its wards, and to attend its clinical conferences.

The School of Nursing

The hospital which aims to reach the highest pinnacle of usefulness will conduct a school of nursing, but will not assign to its younger pupils tasks for which they are not yet fitted. It will be careful in the choice of those who instruct its pupils, and will pay them adequately. It will keep in mind the need of mental stimulation for instructors and supervisors, as well as for pupils. To overcome the tendency to mental stagnation, it will vary the tasks of its permanent staff from time to time, will provide a well furnished library for use of its staff members, and will arrange lectures and demonstrations for their benefit. It will exclude from the school those who are not physically fitted for nursing work and will guard the health of its nurses by limiting the hours of their employment, by providing suitable dormitories, by furnishing plenty of wholesome food, by installing facilities for recreation, by establishing a system of periodic physical examinations, and by applying the most approved scientific means for the prevention of diseases to which nurses are exposed.

Throughout the hospital there must be respect as well as tender regard for the sick; the spirit of service must be shared by all. Brilliant physicians cannot preserve the sanctity of a hospital which disregards the needs and rights of its most humble workers, and thus deprives them of self-respect and of a sense of the usefulness and importance of their work. In the ideal hospital, the health of the workers will be deemed as precious as that of the patients; and lest under the pressure of a multitude of tasks this essential duty be forgotten, let me urge each hospital to keep a record of the sickness occurring among its employees so that the duty of maintaining among the working population of the hospital a sickness rate at least as favorable as that which prevails in the community at large may never be forgot-

ten. Let the hospital be a real health center for the members of its own organization.

A moot question among hygienists is just what constitutes an ideal unit for purposes of health administration. I am confident that a big city is not such a unit, for although for the purpose of controlling environmental factors which are inimical to health, large-scale organization is necessary, the creation of health habits in the individual may be regarded as the foundation of public health, and in a great community the individual is beyond the effective reach of central authority. It has been said that the family is the ideal administrative health unit; the school is by some so regarded and the workshop by others. But the hospital is family, school, and workshop combined. Conceived in a spirit of service for the protection and promotion of health, possessing every known resource for the attainment of its aims, the hospital, whether public or private, sectarian or non-sectarian, while seeking to render perfect service to its patients, should strive to become a model household where health and happiness prevail.

MATERNITY HOSPITAL LICENSING LAW UPHELD BY HIGH COURT

The Supreme Court of Minnesota in a recent decision upheld the constitutionality of the state law requiring the licensing of maternity hospitals. This is the first decision on such an act handed down within the last three or four years. In the appeal to the higher court two questions were raised: Whether the law was unconstitutional because it embraced more than one subject; and whether it violated that article of the constitution guaranteeing due process. The opinion of the court reads:

"The statute defines a maternity hospital for the purposes of the act and provides for its licensing by the state board of control. Conducting such a hospital without a license is a misdemeanor. Regulations are presented for its conduct and for the health and well-being of the inmates, and the public welfare is in view. . . . We are unable to see that the act contains anything which is not germane to the title. Within the constitutional sense it embraces but one subject.

"The statute is a police regulation. Its purpose is to secure the health and comfort and well-being of the inmates of the hospital and to safeguard the interests of the public. That in doing so it somewhat restricts the activities of those conducting maternity hospitals, if the restriction be no greater than is reasonable, is not important. Others than the owners are interested. . . . Many callings having to do with public health may be regulated. Whether the licensing of maternity hospitals should be regulated, as it is by the statute drawn in question, was a matter of legislative discretion; and the statute invades no constitutional right of the defendant under Art. 1, Sec. 7 of the State vs. Women's and Children's Hospital Association.

"We do not agree with the counsel for the defendant that the statute grants to the board of control arbitrary power to withhold a license, regardless of conditions, so that it is therefore void. The statute is paternalistic. So

are other statutes in the exercise of police power. It contemplates an investigation and consideration of conditions and a supervision and regulation by the board; but an arbitrary refusal of a license is not intended.

"The only questions decided are that the title of the act is sufficient within the constitutional requirement, and that in the exercise of the police power the legislature may require maternity hospitals to be licensed."

HEALTH CENTER IS OPENED IN NEW YORK

Welfare agencies have combined with health agencies in the unique health center recently opened by the New York County Chapter of the American Red Cross in the upper East Side of New York City.

Twenty-one organizations, ten of which are devoted to community and family welfare, while the scant majority are concerned with health and nursing, have joined forces in an effort to make this most congested section of the city healthier as well as better. The city department of health has taken the lead and is accompanied by a variety of health agencies, such as the American Social Hygiene Association, the New York Tuberculosis Association, the Association for the Prevention and Relief of Heart Disease, the Association for the Aid of Crippled Children, and similar organizations. Side by side with these are the relief agencies such as the State Charities Aid Association, the United Hebrew Charities, the Catholic Charities and the Association for the Improvement of the Condition of the Poor.

A system of "health bookkeeping" has been adopted by the new health center to make sure that it is adequately covering the needs of the district. Through constant surveys of this area of 100,000 people, the center aims to discover any gaps in its health and welfare program and to introduce new agencies that will fill the needs.

A number of important health moves have already been brought about through the agency of the center. With the cooperation of the city department of health and the American Red Cross, the Schick test has been given to more than 52,000 school children. Fifteen hundred children of pre-school age were prepared for school in the fall. Physicians from the city department of health have examined them physically, while psychologists from Teachers College have graded them mentally. A Red Cross nurse has attended to the removal of physical defects.

Drugs, hospital supplies and equipment, and hospital clothing from Red Cross stocks in Europe and the United States are being shipped into Soviet Russia in increasingly large quantities to be distributed by the American Relief Administration, it is announced. Efforts in this direction are being concentrated on the disease-ravaged provinces of Kazan, Simbirsk, Samara, Saratov and to a limited extent in Petrograd and Moscow.

"Drugs and hospital supplies are extremely scarce and satisfactory medical and surgical work is in consequence impossible," writes Dr. Henry Beewukes, who is directing the distribution of the medical and hospital supplies. "A leading surgeon in Simbirsk told me that they draw thread from clothing to secure suture material. Hospitals are congested and have long waiting lists.

"Our present plans contemplate the supplying of existing hospitals and clinics with drugs and hospital supplies essential to their operation, the organization of clinics at food distributing centers in areas without medical facilities, and the inauguration of measures to prevent and combat diseases in areas in which we operate."

THE NEW BUILDING OF THE BABIES' HOSPITAL OF PHILADELPHIA

By JOHN DIVEN, M.D., Associate Medical Director, The Babies' Hospital, Philadelphia, Pa.

THE new building of The Babies' Hospital of Philadelphia embodies the evolution and experience of ten years; consequently any description of it must be preceded by a short history.

The work of the organization began in 1911 as a country hospital for the treatment of summer diarrheal cases. At that time the imperative need was for emergency treatment, where the greatest good to the greatest number might be immediately accomplished. This seemed best brought about by the creation of hospital beds. At the end of the first summer it was learned that those babies who had gone home well had suffered subsequent illnesses, and that the mortality among them was astonishingly high. This proved the need for adequate "follow-up" work. Visiting nursing was instituted, which in turn showed the need of additional medical supervision; thereupon the medical dispensary was established. Naturally, new families came to the dispensary for examination, treatment and advice. In so far as possible, dispensary and home treatment was given. In other cases hospital or institutional residence was necessary. During the winter months we were obliged to send these patients to other hospitals, except in 1913 and 1914, when The Babies' Hospital was kept open and well filled with respiratory and nutritional disorders. In the summer months, only the diarrheal complaints could be handled at the hospital, because of the limited space and the great number of these cases. Other cases were referred elsewhere.

The visiting nurses, constantly in touch with the hospital and dispensary families, urged that mothers bring the children to the dispensary reg-

ularly for observation and advice. In case of any illness, immediate visits were urged. The dispensary was housed on the first floor of very humble quarters in the poor district of the city, within a few blocks of the present new building. The staff consisted of one physician, who devoted about one hour a day to the work, and one woman, who was clinic nurse, visiting nurse, social worker, and clerk. As the work grew—and it grew rapidly—additional workers were employed and it became necessary to increase the working space. Larger quarters were soon outgrown.

At this time the corporation was presented with a property in the country to which the hospital was moved. Here the idea for permanent buildings in the country came up and comprehensive plans for such buildings were prepared. A little later the organization received a sum of money to be used specifically for city work. The comprehensive plans and deliberations for the hospital included a building in the city for the following purposes:

1. Accommodation and control for ideal dispensaries.

2. Administration headquarters for the entire organization.

3. Adequate facilities for pediatric meet-

ings and welfare conferences, and for teaching medical students, nurses, nursery maids and parents.

4. Facilities for research into pediatric problems.

5. Living quarters for staff.

6. Hospital quarters with proper isolation, for emergency cases or for cases requiring special study.

The original donation created the desire to erect the large center unit. More money was

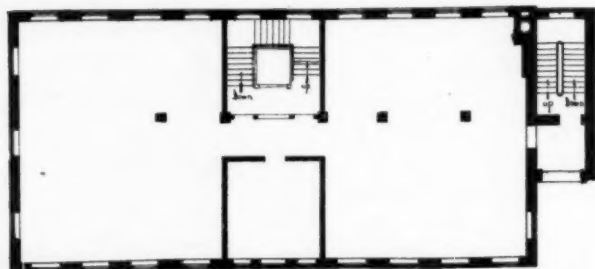


The city building of The Babies Hospital of Philadelphia.

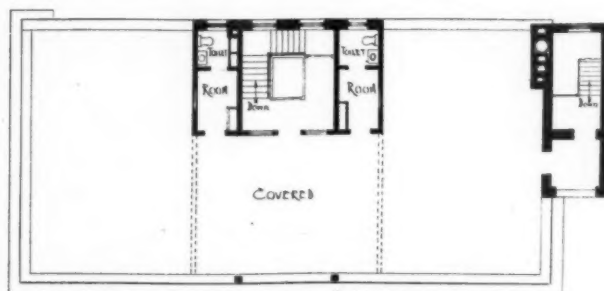
needed and a campaign in December of 1917 resulted in sufficient funds to erect and equip the present building. The plans for the building were evolved about the needs of the organization as enumerated above. Work was begun in the spring of 1919 and the building was formally taken over in December, 1920. Since then most of the equipment has been placed and the various departments gradually instituted, though

the new plant is not yet in full operation.

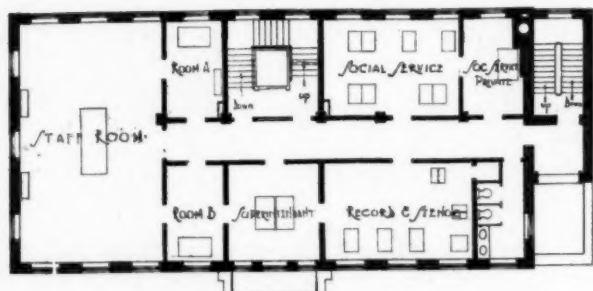
The building is located at Seventh and DeLancey streets on a plat of ground approximately 90 by 100 feet. This location has unique advantages. Light and air are assured on three sides by an open school yard to the south, sixteen-foot building restrictions to the west across Seventh street, and fifty feet of our own ground to the north on Cypress street. To the east, or fire-tower end of the



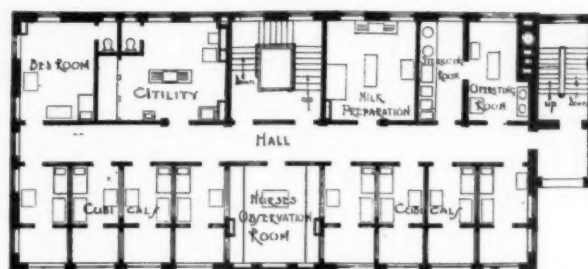
THIRD FLOOR PLAN



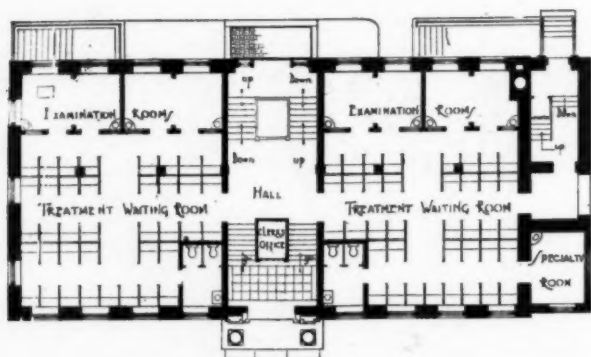
ROOF PLAN



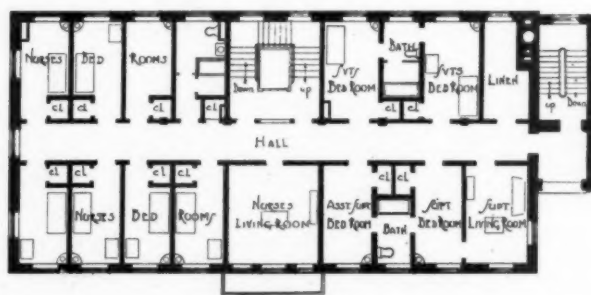
SECOND FLOOR PLAN



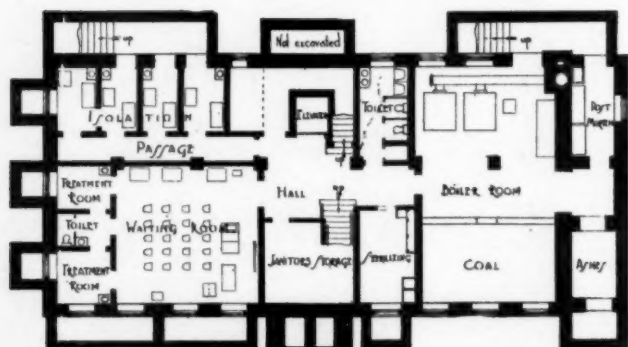
SIXTH FLOOR PLAN



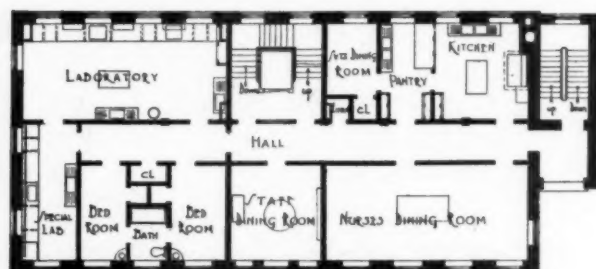
FIRST FLOOR PLAN



FIFTH FLOOR PLAN



BASEMENT PLAN



FOURTH FLOOR PLAN

building, the property abutts three-story dwellings. The architectural style of the building is Georgian. The walls are of tapestried brick and hollow tile, with limestone trimmings. All floors and supporting inside walls are of reinforced concrete. Partition walls are gypsum block. Floors, walls and ceilings round into one another. Angles are avoided wherever possible. The building dimensions are 40 by 90 feet.

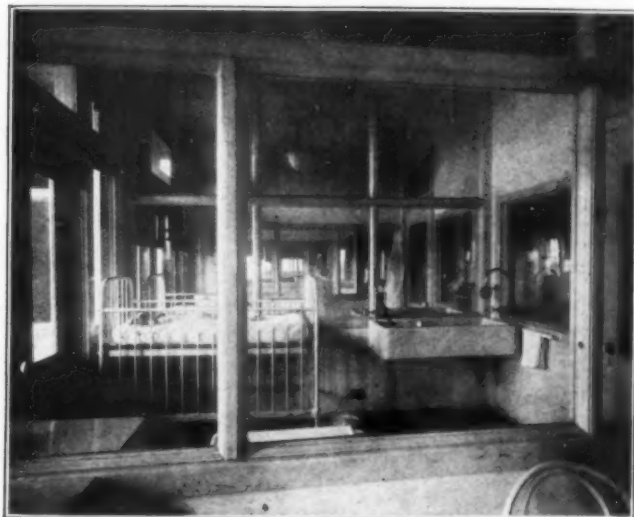


Doorway showing information and admission booth.

The entrance is in the middle of the building and on DeLancey street, two steps above the sidewalk level. Immediately inside is a marble vestibule 15 feet wide and 7 feet deep, to the right of which eight steps descend to the basement and to the left eight steps ascend to the first floor. An information booth is placed across this vestibule between the two stairways. It faces the door, thereby giving its occupant full control of the entrance. From this point patients and visitors are directed.

Dispensary on Main Floor

The basement is one-half above the ground. One-third of the space is devoted to boilers, pumps, furnaces, coal and ash bins. Only low pressure steam is provided, and that for heating. A small room under the fire tower, with exit to a rear areaway, is equipped and used for a mor-



A view from cubicle No. 1 showing detail of the adjacent cubicle with its bath slab and with the baby in the crib. Had this photograph been taken from a point level with the eye the details of all cubicles could be seen.

tuary and post room. A room at the foot of the stairs is used for drugs and supplies. Adjoining this is a small space for mattress and clothing fumigation and space for x-ray and fluoroscopic work. An automatic electric elevator and machinery are to the opposite side of the building from the entrance. Stairs encircle the elevator. In the southwest corner of the basement is a room 21 by 21 feet designated as a special clinic and demonstration room. It contains a lecture and demonstration desk with a removable top which covers a sink and stove inserted in soap-stone. Space below is arranged for cooking utensils. Chairs, blackboard, scales and measuring paraphernalia complete the equipment. Just off this room are two small examining rooms with toilet and wash-room between. Each room has running water



Inside the cubicle may be seen the bedside table with single-service diapers and baby's wardrobe built on the radiator. The crib is on the porch.

and low sink, examining table, two chairs and a desk-table. This clinic is so arranged as to take care of demonstrations to mothers, nutritional teaching, prenatal care, and if necessity should demand, vaginitis could be taken care of at a different hour. On a separate hallway are four small isolation rooms with exits on an area-way leading to the street. Any case which is possibly contagious is directed to one of these rooms where it is examined by a physician and proper disposition made. Each room is equipped with examining table, two chairs, and a desk-table. A sink with running hot and cold water, paper towels, a covered metal waste bucket, and gowns for physician and nurses complete the equipment.

Ascending from the vestibule one enters an open space, 15 by 15 feet, in front of the elevator and stairs and between the two dispensary waiting rooms. The two sides of this dispensary are exactly alike except that on the east an extra



Looking toward the corridor end of one of the cubicles. The nurse's gown, a spray bath and the goose neck over the sink for washing the hands may be seen.

room is obtained immediately to the front of the fire-tower. This room is devoted to the specialties and is fully equipped for eye, ear, nose, throat, and dental work. The dental clinic is the first in Philadelphia to care for children under six years of age.

Across the north end of each side of this floor are four consultation rooms for doctors and social workers. These rooms are small (8x8 feet.) Each has a window and in each is a lavatory with hot and cold running water. The equipment consists of a small desk-table, two chairs, and an examination table of special type. These rooms are so constructed, by means of folding-doors, that two can be thrown together and double space obtained for teaching or demonstration work. The remainder of each side of the floor is devoted to waiting room. In each waiting room are thirty-six compartments. These are metal "stalls" 3 feet wide and 3 feet deep, with a bench seat along the back wall. The partition is six feet in height with a space of six inches at the bottom to facilitate cleaning. A few larger stalls are provided for mothers bringing several children. The stalls are so arranged that there is a wide aisle in front of each row to permit of easy passage.

A mother with her infant enters the building

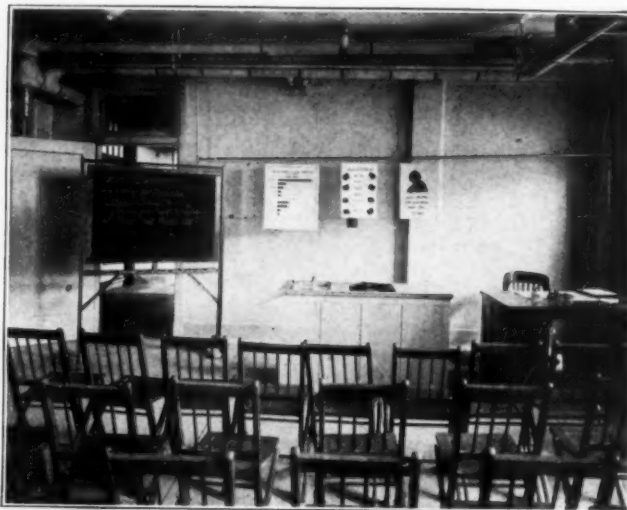
and is assigned at the information booth to a definite stall or isolation room, and to a physician. At the head of the steps she is met by the dispensary nurse, who has received from the clerk at the information booth the patient's dispensary record. She is conducted to a stall where she is seated and instructed to undress the baby and wrap him in the blanket or sheet provided. While the mother waits here the routine medical history is taken by a nurse. The baby is weighed, temperature, pulse and respiration taken and recorded, and the chart sent to the examining room of the physician treating this family. The scales used are on a table which has large rubber-tired wheels so that it can be pushed from stall to stall. This table also carries individual paper protectors for the scales, two receptacles for thermometers (white for clean, blue for used), and a jar with sterile vaseline. There is an attached basin with

solution for washing the hands between cases. By means of the stalls, the individual scalecovers, blankets, thermometers, etc., it is the intention to prevent the mild, as well as the severe, cross infections.

A visiting nurse is in attendance upon each doctor and makes written notes for home instruction. The social worker is within call so that medical and social work may go hand in hand. The same physician treats all children, both sick and well, in



The nurses' observation room gives an unobstructed view through the four cubicles on the east side and through the cubicle porches. A Leonard valve, controlling the bath temperature, may be seen in the left corner.



One end of the demonstration room. The desk is uncovered to show the inserted stove and sink.

any one family. It is here that doctor, nurse, social worker and patient meet and confer. "Well babies" enter at the same time as sick ones—it is our experience that few are "well" and none are not needful of medical instruction and advice. To separate well babies from sick babies we have found impossible, and in well-baby clinics most frequently contagious disease has been found. To direct the well babies and sick babies to separate clinics requires complete physical examination at each visit, or supernatural vision and infallible judgment.

This dispensary floor is the very heart of the building. It is true that at present conferences or clinics are held only at stated hours, although a nurse and resident physician are constantly in the house for the care of emergency cases. Should it become necessary at some future time, it will be possible to maintain constant dispensary service. This work decreases the need for hospital beds, but should there be a case which in the opinion of the medical director requires hospital care or special study, it is sent to one of the emergency beds or to the hospital proper in the country.

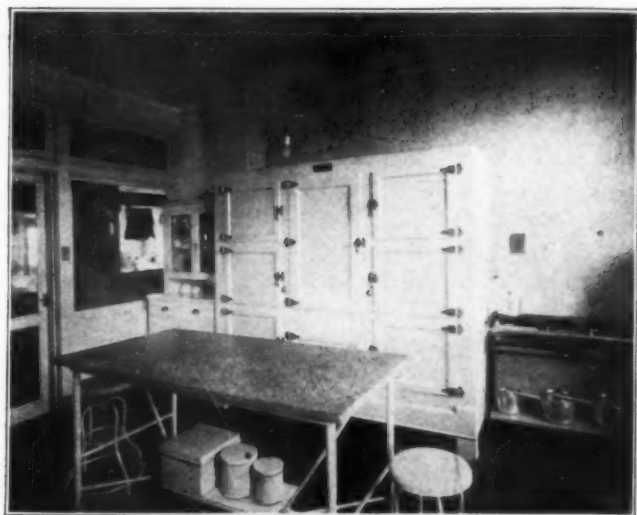
The second floor is the administration headquarters for the entire organization—city, country and seashore. Immediately in front of the elevator and stairs



The specialty room, where treatment for teeth, eyes, ears, nose and throat is given.



A view of the milk preparation room from the corridor, showing the hand basin, combined sterilizer, pasteurizer and bottle-cooler, electric food-mixer, carriage for storing and conveying bottles, which can be used in any part of the room as a table, large sink with double drain boards, large center work table and refrigerator.



The other side of the milk room, showing the center work table, gas stove, refrigerator and supply cupboard.

is the superintendent's office with a small private office to the right and to the left a large room for stenographers, clerks, telephone switchboard, and records. Across the hall from this room is one of equal size which is given up to the visiting nurses, each of whom has her individual desk and files. A small room adjacent is the office of the head social worker, where she may be interviewed by parents or by workers from other agencies at any time.

Across the hall from the superintendent's private office is a room of similar size—the office of the organization's medical directors.

Twenty-one feet of the west end of this floor is devoted to the staff-room and library. It is here that all board and committee meetings are held. This room is also available for the smaller pediatric, nursing, or general welfare meetings, and it is proposed to collect here a library on pediatrics and allied subjects.

The third floor is vacant awaiting future development. It was added at the last moment to prevent the necessity for additional building over the ground space. It has been considered that this floor might readily be thrown into operation as wards in case of a severe epidemic or catastrophe. At present it makes an admirable place for larger meetings or assemblies.

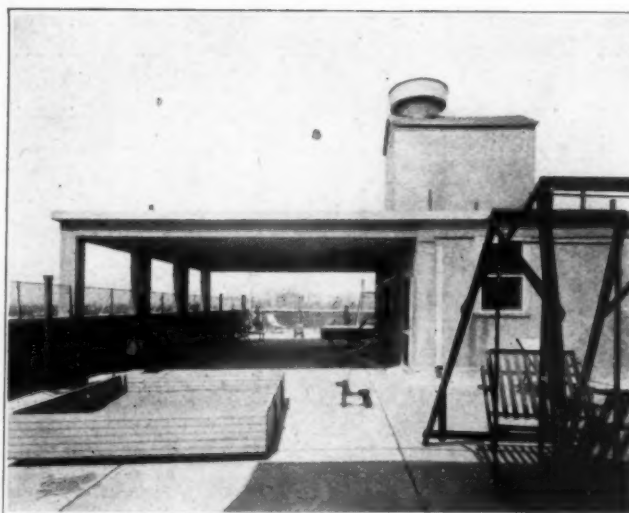
The fourth floor is devoted to laboratories, doctors' quarters, dining rooms and kitchen. The staff dining room lies directly in front of the elevator and stairs, while to the east is a large dining room for visiting nurses, house nurses and nursery maids. It is so arranged and insisted upon that the visiting nurses and social workers meet here at lunch to report and discuss problems that may arise in their daily routine and to create closer contact and cooperation. Immediately across the hall are modernly equipped kitchen and pantries.

The northwest fourth of this floor is a room 15 to 31 feet assigned to general laboratory, with complete equipment. Adjoining this room is one 21 by 8 feet which is thoroughly equipped as a chemical laboratory. Across the hall and adjoining the laboratory are the doctors' quarters—two bedrooms and a bath. Convenience and comfort is assured by basin with running water, large closet and complete furnishings.

The fifth floor is devoted to dormitories and living rooms for the nurses and nursery maids. Each nurse has a separate room with lavatory and running water, a large closet, and complete bedroom furniture.

Nurse Sits in Glass Room

The sixth is the hospital floor. Here instead of the usual cement floor, "marbleloid" has been used to facilitate cleaning. As on all other floors a five-foot hall runs the full length of the building, assuring ventilation. Immediately in front of the elevator and stairs, and across the hall as one enters the floor, is a room 15 by 15 feet, designated as the nurse's observation room. It is here that the head nurse has her desk, charts, and supplies; and here are placed, under her control alone, the Leonard valves which govern the tem-



The roof. The middle third, in front of the pent house, encloses the elevator shaft and service rooms. The usual playground equipment is prominent.

perature of the water used for the babies' baths. This room, as well as the cubicles, has walls solid 32 inches from the floor, above which there is 3 feet of plate glass. The remaining space to the ceiling is solid wall, while in the cubicles it is copper screening to secure better ventilation. Solid removable panels are provided for closing these spaces if it should be found desirable. It can readily be seen that the nurse in her observation room has an unobstructed view into and through the four cubicles which lie on either side. She may see every baby in its bed or in its bath. She may observe the nursery maid in attendance on any baby; in fact, one might say she is constantly with all the babies.

The cubicle is 8 by 8 feet with a porch 5 by 8 feet. Double doors open fully outward, giving a four-foot space for the passage of the crib. Porches are separated by the same walls as are the cubicles with the outside exposure screened. Each cubicle is equipped for one baby. Our own specially designed baby bath is of porcelain, 42 inches long by 20 inches wide, with an eight inch apron. The interior is divided into a slanting bath-slab with a two inch rim, and a basin drain. It is 32 inches from the floor and is supported on wall brackets. The slab is 28 inches long by 16 inches wide, covered with a rubber mat. Over the slab portion of the bath is a water outlet with thermometer, rubber hose and shower-head. The drain basin is arranged to take care of materials from the irrigations, etc. Over it is a high goose neck under which the hands and arms of the attendants are washed in running water. In the baby's room only liquid soap is used. The crib has a stationary 32 inch mattress height with adjustable sides. The bedside table has a shelf for the single-service diapers, and a drawer containing



A view of the field workers' room, showing files and individual desks.



The general laboratory.

a specially designed block into which are fitted all of the small articles necessary in the care of the baby. This outfit includes receptacles for safety-pins, cotton, toothpick swabs (used only for cleaning under the nails), and treatment powder; three small bottles for possible treatment solutions, thermometer, vaseline jar, comb, applicators, tongue depressors, medicine droppers, scissors. A chair is provided for a mother visiting or nursing her baby. Over the radiator is a specially constructed metal cabinet wardrobe, with a door opening down and out serving as a shelf. This cabinet has a perforated bottom so that the heat from the radiator may warm the contained linen and blankets. Two tightly covered buckets are provided, one for soiled diapers and one for soiled linen. The diapers are emptied into an incinerator and the soiled linen into a canvas bag in the utility room, and the buckets are sterilized daily. Behind the corridor door is a hook for the gown which the nurse wears when in the room.

Room for Milk Preparation

Across the hall at the west end of the building is a special cubicle 15 by 10 feet with an attached toilet. In addition to the equipment of the other cubicles this has an adult bed, a wardrobe, a dressing table, a rocking chair and a screen. This room is provided should it be necessary to keep a mother with her baby, a wet-nurse or a special nurse. Next to this room is the utility room with large supply closets, a double-drain sink placed in center of room, slop sink, cabinet for drying clothes, utensil sterilizer, incinerator, nurses' toilet, lavatory, laundry bags and container. Under the window behind tightly fitting doors, communicating with the outside for ventilation, is a space for storing stools for doctor's description and examination.

On the opposite side of the stairs is the milk preparation room, which is 15 by 18 feet. The corridor walls and door of this room are of plate glass so that the milk room may be under supervision as are the cubicles without unnecessary entrance. This room has a center work table with a soapstone top 30 by 60 inches; there is a cupboard for supplies and utensils; a refrigerator divided into small compartments, each designed to hold baskets of feedings for certain hours, thereby avoiding the necessity of opening the entire refrigerator at any one time; a four-burner gas stove; a sink with double drain and swinging goose neck; an electric machine used for passing curds and vegetables through fine sieves; a combination sterilizer, pasteurizer and bottle cooler; and a hand sink. Sterile water is piped through the wall from water sterilizers in the adjoining room. A specially designed cabinet on large rubber-tired wheels can be used as a table in any part of the room. Sliding doors open into a compartment on each side, in which nursing bottles are stored. This room is designed and equipped to prepare and store formulæ for 100 babies. Such a contingency might arise in our dispensary work.

Next to this room are two small rooms, the first containing dressing sterilizer, water sterilizers, instrument sterilizer, utensil sterilizer, slop sink, dressing cabinet and table. The other is a fully equipped operating room for emergency surgery. All sterilizers are gas heated.

The scales are fastened to a table which has large rubber-tired wheels. This is kept in the corridor and wheeled to each cubicle door for weighing the baby. Individual scale covers are used. Set into the wall in the corridor is a cabinet for medicines. This is kept under lock and key in the hands of the head nurse. The equipment of this floor is entirely white enameled steel.

The extreme isolation and protection of patients is provided because there are emergency beds and because only special cases, probably in the house but a short time, are admitted. When a patient has passed the stage of emergency he is transferred to the hospital proper, or discharged to his home for dispensary care and observation. It is our conviction that proper isolation is cheaper than quarantine, entirely aside from the suffering and



Looking down the center aisle of one of the waiting rooms with "stalls" on either side.

the cost in life incurred incident to the cross-infections.

Visiting is discouraged and the parents allowed but one visiting hour a week unless the patient be in a serious condition. Visitors must leave coats and hats at the elevator landing on metal costumers placed there for this purpose, and must put on hooded gowns before entering the floor.

The seventh floor is the roof garden. On either side of the elevator and stairs is a room fitted up as a toilet, washroom and service room. The middle third of the roof is covered, while the remaining two-thirds are open. There is the usual playground equipment for the children, benches and comfortable lounging chairs for the mothers, and small bassinets for the babies. The purpose of this roof is to provide a place where mothers and

children may escape the extreme heat of the city streets and slum districts for a few hours during the day or night. An attendant is on duty during rush hours. It has also been considered that this roof might be used for certain outdoor classes.

Thus in addition to a hospital in the country and a convalescent home at the seashore, there has now been established a dispensary, one unit of a system, which through its conferences and its home instruction, spreads throughout the community health promotion.

In the construction of this building, in carrying out our plans to meet the unique purposes, Mr. Carl A. Zeigler, the architect, has been most patient and persevering. In addition he has combined a beautiful architectural design with simplicity and utility.

A NEW RECORD IN HOSPITAL CAMPAIGNS

BY ROBERT T. KINGSBURY, TRUSTEE AND CHAIRMAN EXECUTIVE COMMITTEE, ELLIOT HOSPITAL, KEENE, N. H.

NO BLATANT publicity, no "sob stuff" no browbeating played a part in what Keene and Cheshire County, New Hampshire, believe to be an unparalleled exhibition of commu-

last census. The amount, of course, was not subscribed by the entire citizenry of Keene, but by 2,914 contributors who gave on the average \$72 each. In the small agricultural community about



Section by section and story by story, citizens of Keene and Cheshire County watched on a billboard the construction of their new hospital as it materialized through their gifts.

nity giving for hospital purposes. A recent campaign for the construction of a Community Hospital brought from the citizens of Keene a per capita gift of \$18.69, based on the figures of the

Keene, the average pledge was \$32.50, the county total being \$63,358, or twenty-six per cent over its quota.

The Community Hospital campaign in Keene

and Cheshire County was twenty-one and a half per cent oversubscribed, the amount in excess of the sum needed for construction and equipment purposes to be used to increase the endowment of the institution. The cost of the entire campaign was less than six per cent of the amount subscribed.

Twenty-nine years ago, when Hon. John Henry Elliot presented the old Elliot estate with its colonial residence dating from 1825 and several acres of land, as a hospital to the city of Keene, the foundation for the new \$225,000 community hospital, which will be built this year, was laid.

After four years of management the city found it impracticable to continue its control and with the consent of the donor, it was transferred to a corporation and has since been under the management of its board of trustees. Local organizations and individuals provided for the furnishing of the hospital and much of its financial support, and although incorporated as the Elliot City Hospital, it met for many years, as the only hospital in Cheshire county, the entire demand that existed. Some time later the Edward Joslin Memorial Home for Nurses was built adjoining the hospital. This has been repaired and renovated during the past few months and is probably adequate for the present.

Ten years ago, when the public began to realize more and more that a hospital is the best place for treatment of ill and injured persons, the inadequacies of the existing plant began to be felt, first by the medical profession and then by the relatively small group of citizens familiar with the work of the hospital and the increasing demands made on it.

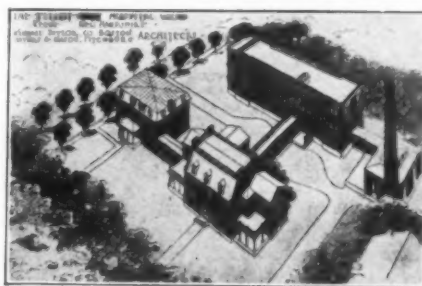
Just before the World War, the trustees and the physicians began seriously to consider the provision of extensions to care for the increasing number seeking treatment in the hospital. When war came, expansion plans were thrust aside. The influenza epidemic and the national shortage of

nurses next gave pointed emphasis to the need of providing enlarged hospital facilities for this community and the residents of the twenty-two towns of the county. Our hospital by then had become thoroughly unable to supply the volume of service that the common good demanded and patients from within this district were, in large numbers, forced to go elsewhere.

Community Plant Decided Upon

Last spring the first active steps toward the realization of the plan to make proper hospital provisions for Keene and the county were taken. The first problem was the scope of the new plan.

It should be understood that Keene, with a population of 11,500, is surrounded within a radius of twenty miles by twenty-two towns of Cheshire County with an average population of less than 1,000. It seemed safe to assume that none of these towns nor any group of them could possibly provide hospital service for themselves except in conjunction with Keene. This city might have remodeled its existing obsolete plant to provide adequate facilities for Keene alone for \$100,000, but the vital needs of the surrounding towns was equally important and the first decision was that it must be a true Community Hospital. A reorganization was effected, the incorporators were



An Appreciation To a Citizen Who Has Met His Civic Duty In Our Greatest Civic Cause

The grateful acknowledgement and sincere thanks of the community is hereby expressed to

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for your pledge which will help to build the new hospital

There can be no nobler effort than the alleviation of human suffering and the saving of human life. Your gift personifies the highest type of citizenship. It makes your community a better place in which to live.

Your example of civic responsibility as a citizen who has become a co-builder of the people's new hospital is a proof that our people are loyal. This loyalty will be further shown by your whole-souled co-operation, now that you are an actual founder of the new hospital, in encouraging your fellow citizens to follow your leadership.

In recognition of your gift, the Trustees of the hospital and the Executive Committee, in behalf of the entire campaign force, cause this certificate to be inscribed in your name.

R. T. Knapman

For the Trustees and the Executive Committee

Good psychology was employed by the committee in preparing official and formal acknowledgment of subscriptions in such a form that the contributors could exhibit them with pride.

increased from twenty to fifty including men and women from the several towns as well as Keene, and the board of trustees was enlarged to fifteen members instead of five.

The new trustees begun a careful study of the community's hospital problem. The hospital, through local connections, has had a consulting staff of prominent physicians and surgeons in Boston and other large cities. First, a survey of the health needs of Keene and Cheshire County was made by these and local physicians. It was agreed that the existing institution had outgrown its usefulness and that a new hospital building

with a capacity of sixty patients should be constructed. The trustees devoted considerable time and thought to the various phases of the problem, making visits to many other hospitals and obtaining counsel and advice from communities where similar hospital expansion needs had recently been met.

Undertaking Seemed Impossible

When a decision on the additional hospital facilities that were necessary had been reached after months of consideration, the trustees turned to the question of the design of the proposed new institution. Several hospital architects were consulted. They appeared before the trustees at separate meetings. Then a man of wide experience in the design of large and small hospitals was chosen. This architect, with the trustees and local physicians, made a detailed study of hospitals in communities similar in their hospital requirements to ours. The architect prepared plans which utilized the present hospital building for administrative and laboratory purposes, continued the present nurses' home and specified a new hospital building. A careful estimate of the cost was obtained and thus the sum required to erect and equip the new institution was determined. The figure was \$225,000 which, in the face of existing business conditions and the relatively small population, seemed an almost impossible undertaking. The trustees felt, however, the need was so urgent, not only for increased hospital facilities but for an institution that should conform to the standards of the American College of Surgeons and should be large enough and broad enough to provide a complete training school to relieve the serious shortage of graduate as well as student nurses, that no postponement could be considered.

The next step was to present the need of the new institution to the public and to obtain from the people the funds for its construction and equipment. This was regarded as the most difficult task to be solved in providing the hospital that was so urgently needed. Thought and study by the trustees convinced them that to raise a fund of \$225,000 from a city of 11,500 population and from the 20,000 people of the twenty-two scattered towns in the county, it would be necessary

thoroughly to develop every resource. This, they believed, could only be done with the assistance of trained and experienced organizers who had conducted similar movements successfully. After investigation in other New England cities, where through organized appeals large funds had been obtained for construction purposes, the trustees engaged the services of an experienced campaign executive.

Preparing for Campaigns

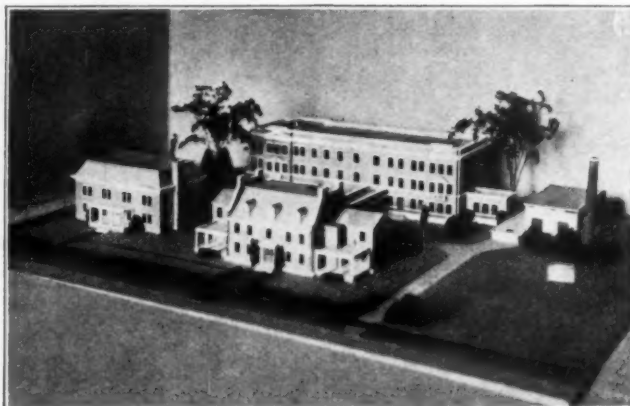
Early in September an office was opened in the Chamber of Commerce and the preparatory work under the guidance of the director and his trained staff was begun. It was realized that the success of the movement depended upon the thorough education of the public in what the existing institution had done and was doing in the growing need of Keene and the county for more adequate hospital service, and in the necessity of building a larger new hospital if the health needs of the county were to be met with reasonably adequate facilities.

First, the service which the hospital had given and its present struggle against the severe handicaps of an overcrowded and insufficiently equipped plant were presented in terms easily understood by the public. This was done

through the newspapers and by means of circulars. An analysis of the number of patients from each town in the county who had been cared for was made and the number of days' care given to the residents of Keene and to those of each of the county towns in the past 29 years was graphically shown by a map of the county which was published widely.

Course in Hospital Finance Given

Next, what amounted to a course in hospital finance was given through the newspapers and by direct mail to the public. Among other things, this included an interpretation of the hospital's accounts since its founding. The public was made to realize that a large portion of the hospital's service had been given without compensation. The fact that it cost nearly \$100,000 more to care for the patients than they paid was visualized in graphic statements. For example, it was shown that whereas the average cost per patient for the last fifteen years had been \$2.10 a day,



A model of the Community Hospital group put the goal of the campaign graphically before the public.

the average income had been only a little more than \$1.50. That the public might realize the difficulty of financing the hospital's work, it was shown in simple terms that last year, when the ward rates were only \$1.50 to \$2.00 a day, the average cost per patient per day was \$3.13. That the hospital was really a public service institution began to be recognized.

Preparation of a map showing that there was not a complete general hospital within forty miles of Keene, wide publication of the fact that there was only one hospital bed for each 1,000 residents of the county, and a widely disseminated statement showing that the present institution was far from adequate, were next in the program of the educational campaign preceding the appeal to the people.

A full statement of the existing hospital facilities, the recommendation of recognized outside hospital officials that a new modern hospital should be constructed, and a definite estimate of the cost of building and equipment, were submitted to the people. The Chamber of Commerce, the Women's Club and other organizations passed resolutions endorsing the undertaking to establish the new hospital and urged the public to support the movement to raise the \$225,000 that was required.

Campaign Organization Perfected

Trustees and other influential business and professional men were organized as the executive committee. They began late in September to organize a force of 350 men and women throughout the county. This force in a series of individual interviews was to lay the evidence in support of the program to establish the new hospital before the residents.

In Keene 125 men and 125 women were organized in groups or teams. In adjoining towns similar groups with local chairmen were organized. This large body was formed in a period of four weeks. All this time the educational campaign was increasing in intensity.

The presentation of the hospital's case to the public in advance of the actual appeal began to show evidence that the people were being thoroughly awakened to their responsibility in the provision of proper facilities to meet their own health requirements.

A staff of speakers who became intimately familiar with the present facilities, the policy of the hospital's management, its limitations, and the need for a new and larger hospital began to spread the essential facts of the hospital situation throughout the county. These speakers addressed fraternal organizations and spoke at the motion picture theaters and other places of public as-

sembly. These addresses, the newspaper articles and other means of publicity helped to create a more general understanding of the functions of a modern hospital and the relations of such an institution to the welfare of the individual as well as to that of the whole community.

Hospital Week Declared

Then arrived the critical week. The question whether the people would give the fund to build the new hospital was to have its answer. The force of citizens, organized and ready, had become familiar with the hospital situation in every important aspect. They knew the facts because they had studied the carefully prepared statements of the need and had attended meetings at which the appeal was carefully analyzed.

To the number of 350, the workers assembled at the City Hall on October 21 to launch our biggest community undertaking. Orville E. Cain, the mayor, and the president of the hospital board, Maj. Frank Knox, editor of the Manchester Union and an advocate of health betterment activities in the state, Windsor H. Goodnow, prominent merchant and state official, and others, addressed the meeting. The high points of the appeal thus were presented in vigorous addresses. The long hoped for civic effort to provide proper safeguards for the public health was actually under way.

Each member of the force of citizen workers the next day set out to lay the need of the new hospital before a selected list of residents. To the public a statement giving the outstanding features of that hospital's need, with illustrations showing the new building, describing its new features, which were to include a maternity department, an x-ray department, bacteriological and pathological laboratories, as well as a large surgical department, had been sent out.

The week of the appeal had been proclaimed as Community Hospital Week by the mayor. The clergy had referred to the need of an adequate hospital from their pulpits the Sunday before. The speakers had been presenting the case nightly. The motion picture theaters were exhibiting slides showing the new hospital and giving facts about the need. Posters were in store windows and business buildings throughout the county. The correspondence of business concerns contained a printed summary of the hospital needs of the community and a statement of how they could be met by the new hospital. An illuminated model of the new hospital group in a prominent store window attracted much attention. A splendid cooperation had been developed and was everywhere in evidence.

That the public might follow the growth of the fund a billboard, containing a recessed painting

of the new hospital building covered by a curtain on which appeared scaffolding and preliminary masonry work, was erected on Central Square. Each day that part of the new building, provided by the gifts obtained, was shown by raising the curtain and exposing part of the recessed picture of the new structure. Red lights around the edge of the novel recording device were lighted for each \$5,000 subscribed.

From the first day it became apparent that by taking the public into partnership in the undertaking and by having devoted almost two months to the constant presentation, always along dignified lines, of the health needs of the community, the inability of the present institution to meet them, and the proposed solution of the problem through the building of a new hospital through public subscriptions, the executive committee had assured widespread support for the movement.

The first day of the returns, \$50,000, was reported subscribed by the workers at the initial rally report supper. Five such meetings were held in the city hall and when the final reports were received, the total was carried to \$273,465, given by 4,862 subscribers. On the closing evening, the square in front of city hall was filled with givers who were not going home until they had learned the final results. When that announcement was made, every electric light bordering the unique billboard burned red and ten more red lights were hastily added on a strip over the top. The church bells began ringing, cheering crowds and blowing whistles proclaimed that no longer were our people to be denied the best hospital service that modern science could provide.

Appeal Made to Reason

What is regarded by the several hundred public-spirited men and women who raised the fund, with its 21½ per cent over subscription, as one of the most gratifying features of the undertaking, is the fact that throughout the movement there was not a single evidence of the use of coercive measures to obtain subscriptions.

In no sense was the undertaking a drive. No one was browbeaten into giving. The hospital put its case frankly before its public. The movement was fundamentally an appeal to the reason of the people. That this, rather than an emotional appeal, was the best course is evidenced, we believe, by an analysis of the figures. In Keene 2,914 contributors gave \$210,106, an average subscription of \$72.00 and according to the last census a per capita gift of \$18.69. This was 20 per cent in excess of the quota of \$175.000 and further evidence of the general high standard of giving in the fact that there was but one pledge of \$10,000 and three \$5,000. The county total of

\$63,358 was twenty-six per cent over its quota of \$50,000 and was pledged by 1,948 subscribers. This was an average gift of \$32.52 and we feel that it was a remarkable result for small agricultural communities. Investigation of similar campaigns for hospitals has led us to believe that our results establish a new standard of community giving for hospital purposes. The amount subscribed beyond that needed for construction and equipment will be used to increase the endowment of the hospital, which is now almost \$100,000.

The hospital, as a result of going frankly before the public in the manner indicated, has gained at least 4,000 new supporters who subscribed liberally because the hospital succeeded in convincing them by facts alone that it is an institution that merits their support.

Campaign Cost Was Low

The attitude of our citizens during the three months that has elapsed since the movement ended, and their present interest in the hospital make many of us feel that the situation has so firmly established itself in the public mind and its relation to the public welfare is so generally understood that its future financial needs are certain to be met as they develop. This, of course, can be done only by making our new needs clearly understood by our enlightened citizenship, whose gifts have now assured our long hoped for and much needed new hospital.

Ground will be broken for the new hospital in the spring and it will be completed January, 1923.

The total cost of the campaign, including all expenses incurred in the many phases of the undertaking, was less than six per cent of the total of \$273,465 raised. Subscriptions were payable in semi-annual installments over a period of two and one-half years. This plan was used because it was felt that under existing conditions the public could not give in cash the amount needed.

From the very first days of planning we went forward with the determination that the immediate raising of the fund was not our ultimate goal. That we should blaze and leave behind us a trail of good will always leading to a vision of closer community spirit and civic advancement seemed equally important. And now, three months after our success, the raising of the fund almost pales before the greater, intangible brotherhood of Cheshire County, of a greater good will between city and towns than has ever existed.

METHODIST ASSOCIATION TO MEET

The annual meeting of the National Methodist Hospitals and Homes Association will be held February 15-16 in Chicago at the auditorium of the Methodist Book Concern, it is announced.

WINNIPEG MUNICIPAL HOSPITALS HAS SPLENDID NURSES' HOME

BY GEORGE STOKER, SECRETARY AND BUSINESS SUPERINTENDENT, MUNICIPAL HOSPITALS DEPARTMENT, WINNIPEG

BUILT at a cost of \$389,000, exclusive of furnishings, and having accommodation for 187 nurses and female help, the new nurses' home for the Winnipeg General Hospital was designed by Mr. R. E. Davies, city architect, acting in conjunction with Alderman A. H. Pulford, chairman of the hospital commission; George Stoker, secretary and business superintendent; E. H. Rodgers, inspector of buildings; Mary E. Martin, superintendent of nurses; and Thomas Townsend, hospital engineer. Messrs. Carter-Halls-Aldinger were the general contractors and the building is unique in the sense that the city of Winnipeg entrusted its design entirely to its own staff. The building has four stories and a basement and is fireproof throughout. The outer walls are of solid brick faced with tapestry brick and having trimmings of Tyndall stone. The brick is of a reddish brown and the whole outer effect is relieved by the interesting placing of wings and rhythmic spacing of windows and also by the sub-division of the windows themselves.

Floors are of reinforced concrete supported by means of reinforced concrete beams and posts, and all dividing partitions of solid two-inch plaster and four-inch hollow terra cotta tiles.

The basement is sub-divided into lecture room, gymnasium, private laundry, linen supply room, trunk room and helps' recreation room with serving room, dressing room and kitchenette attached. On this floor is also located the steam room connected to the main power plant of the institutions by a tunnel six feet six inches high by five feet wide. Off this steam room is the cage into which the soiled linen chutes discharge. It is situated at a point convenient for loading at the delivery entrance nearby. Off the main corridor of the basement is a public toilet.

The floors of the basement are all finished in hardwood with the exception of the corridor, trunk room, kitchenette and steam room which are faced with asphalt. Wood trimmings are finished in golden oak satin rubbed effect and the walls and ceilings painted in soft harmonious flat washable colors, excepting the trunk room which is faced with cement and lime washed. Double tiers of racks support the trunks, and ceiling lights are located over each gangway.

The fact that the building is set up well out of the ground is responsible for perfect daylight in the basement everywhere but in the trunk room where artificial light is sufficient.

Entrance to the trunk room is obtained through two sets of double doors allowing easy access and egress for trunks either to push button automatic elevator opposite, in case a trunk has to go to a room, or to the delivery entrance when a nurse is coming or going. This delivery entrance has an inclined asphalt grade permitting delivery rigs to back down to the doorway and thus avoid unnecessary lifting and handling of heavy pieces.

The linen supply room is located with a view to easy delivery of laundry baskets and the subsequent distribution of linen to floors via the elevator.

The first floor consists of a capacious pillared entrance hall painted in soft flat stone effects with doors, window trimmings and dado's in quartered oak, antique finish.

The floor is of patterned grey terrazzo. At the left of the main entrance is the office and elevator and at the right a men's cloak and dressing room for use during entertainments.

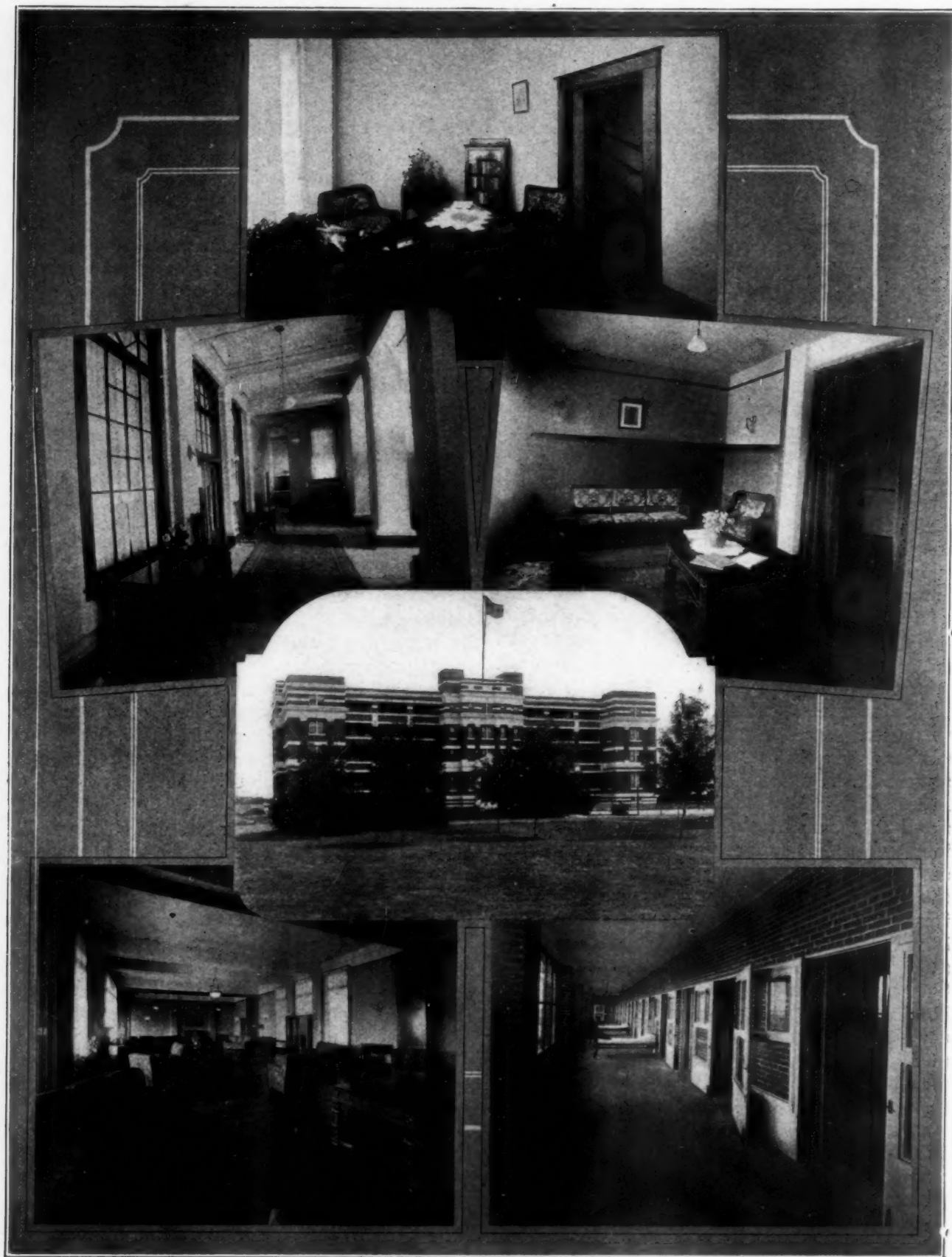
The hall leads directly to the reception room through double oak doors with bevelled plate glass panels. The reception room is eighty feet by thirty-five feet and is capable of subdivision into three smaller rooms for everyday needs by the use of accordeon folding doors.

The floor and all woodwork is of oak, finished in a dark antique color as also is the woodwork of the mantel and trimmings of the fireplace, the latter relieved with marble panels the edges of which are faced with burnished steel.

The paper on the walls is stippled grey with suitable frieze and the large Scotch Axminster rugs are also in grey with border of darker shade of the same color. Softly contrasting with these greys are the rose and blue of the furniture tapestries and the overcurtains. The overhead lighting fixtures in the hall and reception room are of the indirect type radiating soft amber tinted colors and these are supplemented by well-placed oxidized embossed brass wall brackets at each side of the fireplace, and at other convenient points, as over secretaries, etc. These wall brackets are of the double vertical candle type, the light bulbs capped off with miniature shades of bright colors.

Two sets of double French doors and an abundance of large high windows, each having diamond shaped center panels as a motif, results in an abundance of natural light and at the same time gives access to a screened veranda of spacious dimensions, making a favorite retiring place

GLIMPSES OF THE NEW NURSES' HOME OF WINNIPEG MUNICIPAL HOSPITALS



Center—The new nurses' home from its western elevation. All other elevations overlook the Red River of the North. Top—One of the music rooms or sun parlors which open off the entrance hall. Upper left—A view of the entrance hall. Upper right—A smaller sitting room such as is provided on the upper floors. Lower left—The main reception room. Lower right—A sleeping balcony overlooking the river.

between dances or on warm summer evenings.

A kitchenette equipped with sink, cupboards, refrigerator and electric hot plates from which light refreshments may be served, is conveniently adjacent.

At one end of the reception room is a disappearing platform sliding on castors into or out of the wall like a drawer. This is faced to match the base-moulding around the room and except that it is equipped with two drop handles is entirely unnoticeable. In case of speech making or entertainment of any kind platform accommodation is thus obtained at a moment's notice.

At the opposite end of the room are connections for the motion picture machine.

Furniture is of Jacobean oak with an abundance of all-over upholstered Chesterfields and inviting looking easy chairs in heavy tapestries with odd pieces in stained reed to lighten the effect, whilst across the entire library end of the room is an immense built-in oak bookcase with sliding doors and diamond shaped leaded glass panels to match the windows. Here a branch of the public library is maintained for the benefit of the staff.

At either end of the entrance hall, separated from the reception room by the corridors leading to bedrooms and furnished with all glass fronts and a westerly exposure, are sun parlors. These also serve as small sitting rooms to which a nurse may take the members of her family or other intimate friends for a private chat.

With the exception of the superintendent of nurses' suite the remainder of the main floor is given over to bedrooms all of which are of a standard pattern. Each end of the building has its complement of baths, lavatories, and toilets, every set of baths having a shower bath room equipped with head and body sprays.

Bedrooms facing east and west open direct to sleeping balconies and those at the north and south extremities of the building have access to the same balconies through doors leading from

corridors. All doors are large enough to pass a three-foot bed, and there is outside sleeping accommodation for everyone. The balconies are ten feet wide allowing adequate room past the foot of beds for another bed to be wheeled to some other location if necessary. These balconies are all screened and the floors finished in asphalt. The end rooms not opening directly on to balconies and being larger than the standard single bedrooms are given over to dietitian, charge nurses, etc., and those holding the more important positions.

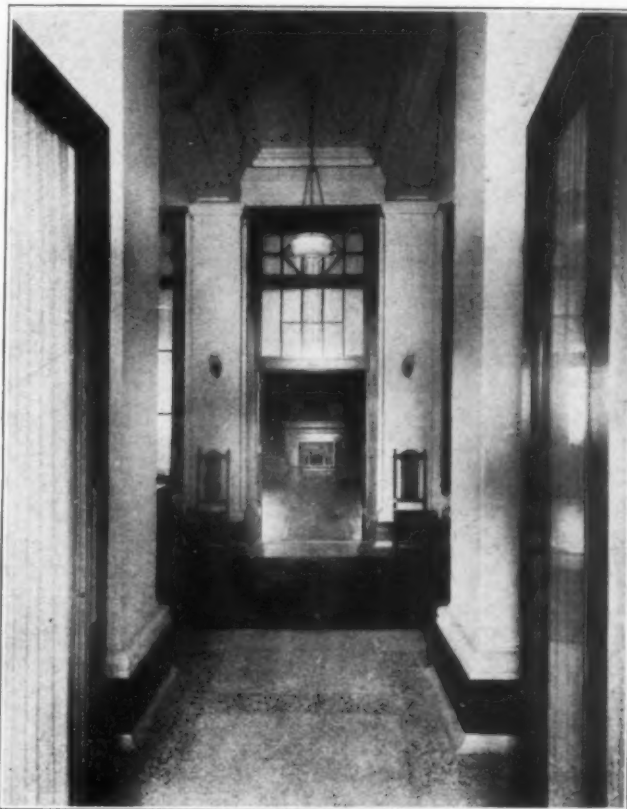
The average size of the standard single bedroom is seven feet eight inches by thirteen feet six inches minus a clothes closet four feet deep

by three feet wide equipped with a hat shelf with rod beneath and a shelf for boots nine inches from the floor. The placing of closets, doors and windows and a prearranged idea of the location of furniture has resulted in not a foot of space being lost in these rooms.

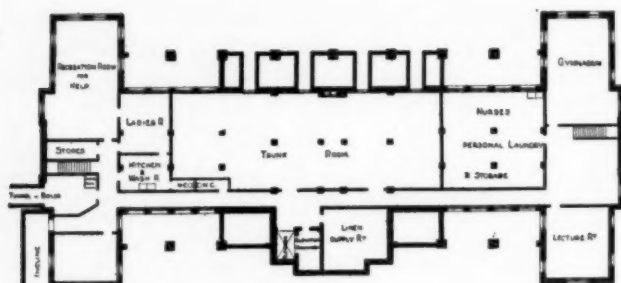
The clothes closet is behind the door leading from the corridor to the room, the one door closing the other should it be open. Each of these closets are equipped with a small brass strap latch and staple so that the nurse may padlock. Its depth is a little more than equal to the width of the bed which fits into the recess thus provided. Directly opposite so that the bed may be easily

wheeled out to the balcony, is a four foot door, the top two-thirds of the surface of which is glazed, thus forming a window, the top third consisting of double glazed sliding sash opening either way for ventilation. The narrow side of this doorway leaves room for the steam radiator and the other and wider portion a place for the dresser. A chair and a table at either the foot or the side of the bed and a small painted steel waste basket completes the standard equipment. A wall bracket is located at the head of the bed and another at the left of the dresser. Each has a chain pull switch.

Beds are of the day-bed pattern but of a three-



The entrance hall, looking directly through to a reception room. Gray terrazzo floors with pillars and walls in stone and woodwork in dark oak produces an imposing, yet restful effect.



Basement plan.



First floor plan.

foot width, of square steel tubing finished in furniture finish and mounted on four-inch rubber-tired wheels. The woodwork of the room is finished to match the furniture, a golden oak rubbed satin finish, and the walls are painted in flat finish washable paint, each floor being treated with a different color scheme.

The glazed doors leading from bedrooms to balconies are duplicated on the outside, thus providing the equivalent of a storm door or window. In summer these doors are latched back against the inner balcony walls out of the way and when winter comes all that has to be done is to unlatch and close them, thus doing away with the necessity of removal, storage and subsequent replacement of storm windows each year. This storm door ventilates in the same way and is an exact counterpart of the inner door from which it is separated by the width of the wall, in this way providing an intervening dead air space.

The superintendent's suite consists of hall, sitting room, bedroom, sun room, kitchenette and bath room and occupies the southeast corner of the main floor.

The sitting room is equipped with an electric fire place and the walls, ceilings and furnishings are tastefully decorated. The sun parlor has removable glazed sash replacable with screens for summer use.

The second and third floors are identical and are given over to bedrooms with a sitting room and kitchenette occupying the west center, toilet rooms at each end, and a small supervisor's suite in the southeast corner.

These uncommonly bright and attractive sit-

ting rooms are twelve by eighteen feet and are furnished in rattan, upholstered in bright cretonnes with curtains to match. Each is equipped with writing facilities and adjacent is a complete kitchenette where a light meal may be prepared at a moment's notice.

The fourth floor is given over to maids and is identical with the second and third except that the rooms are designed to accommodate two beds and contain two cupboards.

Cooks and housekeepers, etc., occupy the larger corner rooms on this floor.

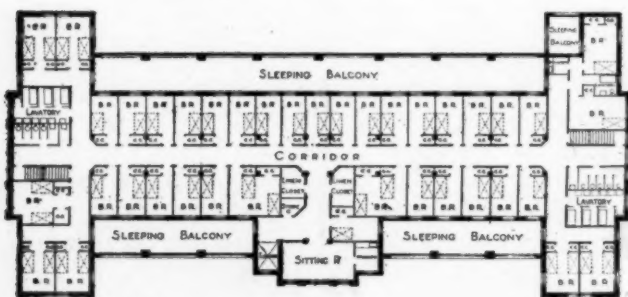
All rooms are numbered and each door has a small oxidized label holder affixed to receive the occupant's visiting card. On every floor a roomy telephone booth adjoining the sitting rooms with a small glass observation panel in the door.

Terrazzo-floored concrete staircases at each end of the building serve as fire escapes as well as means of everyday communication between floors in case of elevator repairs.

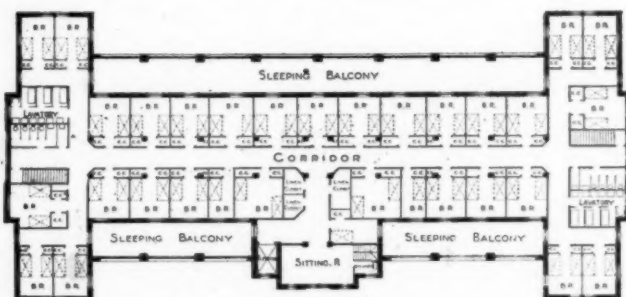
Situated at points on the main floor where nurses pass immediately before entering the hall on their way out are life-sized plate glass mirrors facing the turn in the corridor, enabling a final inspection before leaving, and in the bathrooms are built-in mirrors occupying the entire area lengthwise over each battery of wash basins.

Floors of Hard Maple

Floors of all bedrooms and corridors are finished in hard maple, reception room in oak, hall entrance, vestibules, bathrooms, toilets, kitchenettes, and staircases in terrazzo; and balconies in asphalt, whilst the walls in toilets, bathrooms, and



Second and third floor plans.



Fourth floor plan.

kitchenettes are finished in Keen's cement up to six feet and heavily enamelled. All terrazzoed floors have a six inch cove where they join the wall.

Electric current being cheaper in Winnipeg than in any other city on the American continent (500,000 horse power being the daily consumption, and the cost for cooking and heating one cent a kilowatt), electric cooking devices of every kind are freely supplied throughout the kitchenettes. Each of these kitchenettes has built-in cup-



A typical single room photographed from the balcony. At the head of the bed and behind the door is a large closet. The beds are of the day-bed type but are three feet wide; they have furniture finish and rubber wheels.

boards with sliding doors. The tops of these cupboards are covered in zinc and serve as tables for the accommodation of hot plates, toasters, etc., as well as for other purposes. The kitchenettes have outside light and are bright and attractive little rooms.

The four upper floors of the building are heated with steam, but the basement with the hot water resulting from the condensation of the steam above. The hot water after it has heated the basement flows by gravity back to the power plant located in another building connected by tunnel.

At the end of each corridor are rising bells operated from the office on the main floor for the purpose of calling the staff in the morning and a fire alarm system also focuses at this point as well as all door bells.

The site is an ideal one for hospital purposes

and occupies twenty-five acres of ground in the extreme southeast corner of the city. It is bordered on two sides by the Red River (of the North) and on the other two sides by terminating streets, thus providing a quiet zone of natural formation.

The grounds provide almost the entire needs of the hospital in the way of vegetables, are surrounded by a double row of young maples, and are being beautified and made more park-like from time to time.

MORTALITY FROM TUBERCULOSIS

The Department of Commerce, through the Bureau of the Census, announces that nearly 100,000 deaths were due to tuberculosis in the death registration area of the United States in 1920, and if the rest of the United States has as many deaths from this cause in proportion to the population, the total number of deaths from tuberculosis in the entire United States for 1920 was about 122,000, while for 1919 the number is estimated as 132,000, or 10,000 more than for 1920.

The trend of the tuberculosis death rate is downward. In the registration area of the thirty-three states which show rates for more than one year, twenty-nine show their lowest rates for the year 1920. The tuberculosis death rate in the registration area in 1920 was 114.2 per 100,000 population against 125.6 per 100,000 population for the year 1919.

To permit better interstate comparisons for the year 1920, adjusted rates based on the standard million population have been calculated. The highest "adjusted" tuberculosis rate for 1920 is 215.7 per 100,000 population for the state of Colorado, and the lowest is 40.8 per 100,000 population for the adjoining state of Utah. The high rate for Colorado is evidence not of unhealthfulness of climate, but of the attractiveness of the Colorado climate to those afflicted with tuberculosis.

For the states in which at least ten per cent of the population was colored, adjusted rates have been calculated separately for the white and colored populations. In this group of states the highest adjusted tuberculosis rate for the white population is 137.6 per 100,000 for Kentucky and the highest adjusted rate for the colored population is 354.9 per 100,000 population for the same state. The lowest adjusted tuberculosis rate for the white population is 54.2 for Mississippi and the lowest for the colored population is 175.2 per 100,000 population for Florida.

TUBERCULOSIS CLINIC ESTABLISHED

A tuberculosis clinic for ex-service men was opened recently at the Veterans' Bureau, 23 West 43rd Street, New York City. The clinic has been established at the suggestion of the New York Chapter, Red Cross, which is constantly finding new cases of men who developed the disease while in the service, but who are unwilling to go to a sanatorium for treatment.

The Veterans' Bureau has also recently established in New York, a mental clinic where men who are not seriously enough affected to be sent to institutions can receive treatment. It is estimated that eighty per cent of the men coming to the medical social service department of the New York County Red Cross each year—or about 1,000—are mentally unbalanced and in need of such treatment as the new clinic affords.

RECENT HOSPITAL LEGISLATION

BY DOROTHY KETCHAM, CHICAGO

ALTHOUGH hospital legislation enacted during the year 1921 has not yet been published or made available for all the states, a brief summary of the more important laws is given in this article. The discussion is divided into three general parts: (1) those laws dealing with the licensing, inspection and regulation of hospitals; (2) those dealing with the incorporation, tax exemption and public aid of hospitals; and (3) those dealing with the organization and management of hospitals. Laws, such as those passed in Connecticut (c241), Idaho (c233), Iowa (c40), Missouri (SB98), Nevada (c23), Oklahoma (c4) and Texas (c9), relating to the reports of hospitals concerning the existence of ophthalmia neonatorum and the use of prophylactic solution in the eyes of the newborn have not been included. The arrangement of material will be by subject matter and state. Reference will be made only to the chapter or page of the laws of 1921, as indicated by the letters and numerals inclosed in parentheses.

Three states have required the licensing of maternity or lying-in institutions—Idaho (c57), Missouri (SB152), and Texas (c76). The license is to be obtained from the state board of health, the department of public welfare or the state board of charities and corrections, as the case may be. The institutions are subject to inspection and must make certain reports to the state board. The licenses are renewable annually in Texas and Missouri; in Idaho every two years. Maine (c86) transferred the licensing and supervision of maternity hospitals from the state board of charities and corrections to the state board of health. Every license of a maternity hospital is revocable at will by the authority granting it in New York (c555).

Inspection and Regulation

In Michigan the state board of pharmacy is to inspect during business hours all pharmacies, dispensaries, stores, or other places in which drugs, medicines, and poisons are compounded, dispensed

From the vast volume of legislation enacted in the various states during their respective legislative sessions in 1921, Miss Ketcham has culled the laws relating to hospitals. Although all except a very few of the state law-making bodies were in session in 1921, no exceptionally important enactments bearing directly on hospitals were made. Undoubtedly of prime importance in reviewing hospital legislation of the past year is the passage by three states of bills requiring the licensing of maternity or lying-in hospitals. Idaho, Missouri and Texas have written such requirements into their laws. Several states by new or amended legislation have granted state aid for hospital purposes.

or retailed. The board of commissioners for the general supervision of penal, pauper and reformatory institutions by (393) of the same state is to inspect annually every county infirmary, county jail, and every private incorporated institution for the care and maintenance of the aged and defective. Insanitary conditions are to be reported to the county, city or village clerk, giving the nature of the findings; if within

a year the conditions are not remedied the institution may be condemned.

California (c60) has created a department of institutions with a director appointed by the governor. The department is vested with the powers and duties of the various state hospital boards. The Colorado board of charities by (c85) is to have the control, management and supervision of certain state institutions, the state hospital, penitentiary, etc. This board is to employ the physicians, nurses and attendants.

Michigan, (163), created a state welfare department within which there is the state hospital commission consisting of seven members, the legal successor to the corporate powers, duties and responsibilities of the several boards of control of the six state hospitals. The board has supervisory or visitorial powers over "every private hospital, institution, or other home in which persons mentally diseased are treated or kept in custody under contract of hire under the commitment of any court." In the same state by (401) all asylums and hospitals are to be constructed as nearly as practicable to the provisions of the act concerning health, safety, ventilation, etc., according to the plans and specifications approved by the state fire marshal as to safety, fire protection and prevention and by the state board of health as to sanitation, light and ventilation. Charitable organizations or institutions which solicit public donations or memberships in Michigan, by (205), are to file with the state board of corrections and charities a statement giving their name, location, purpose, etc. These organizations or institutions are to be licensed by the board.

Connecticut has by (c82) attempted to prevent the defrauding of general hospitals. In New Jersey (c153) any person who obtains food, lodging or other accommodation or service at any hospital with intent to defraud is declared to be a disorderly person. Prima facie proof of the intent to defraud is the refusal or neglect to pay for food or service on demand, the use of negotiable paper on which payment was refused, absconding without paying for service or surreptitiously removing or attempting to remove baggage. Massachusetts (c319) has established time limitations for actions of contract or tort against hospitals or sanatoriums; two years after the cause of action occurs in the case of alleged breach of contract or of tort is the limit; for libel the limit is one year.

Persons who are confined, detained or imprisoned in any state, county or city hospital for the insane or feeble-minded, or in any private or charitable institution where a person may be confined, detained, or imprisoned by order of a court are to be examined and, if infected, be treated for venereal diseases by the health authorities having jurisdiction, Colorado (c190).

The New York state commissioner of health is from time to time to examine and inspect the sanitary conditions of all state institutions; to report his findings and recommendations to the president of the board of managers or trustees in charge and to the fiscal supervisor of state charities (c510). The superintendent of an insane hospital with the approval of the state commission may enter into an arrangement with local authorities, municipal, county or others, under which the laboratory services of the hospital may be made available to such authorities, New York (c673).

The following corporation laws which relate to the organization or incorporation of profit making or charitable hospitals have been included: California (c134) amends the code concerning the changing of articles as to the location, purpose, etc.; Colorado (c79) amends a previous law concerning the acknowledgment and filing of certificates of incorporation; Michigan (84) enacted a general corporation law which clarifies the legislation there and makes special provisions for four types of corporations for the purpose of carrying on any lawful business. Montana (c56) outlines the procedure for amending the articles of incorporation. Oklahoma (c28) amends a previous act relating to the formation of private corporations for benevolent and charitable purposes. These corporations have the right to purchase, hold, improve and convey real estate for the purpose of their incorporation and to transact any and all business connected therewith.

In passing upon the tax exemptions, the courts have very generally held that statutory provisions will be construed strictly and that property for which exemption is claimed must be shown to be clearly within the provisions of the act. The term hospital may not appear in the section but an expression such as "religious, educational, charitable, scientific institutions" or its equivalent may be used.

Colorado (c200) exempts from general taxation "lots with buildings thereon if said buildings are used exclusively for charitable purposes." Connecticut (c109) amended the general tax law to exempt the buildings or portions of buildings and the land on which they stand exclusively occupied as infirmaries and "all property of any hospital society which is supported wholly or in part by state appropriations." Delaware (c9 sec8-4) exempts from the income tax law corporations organized for religious, charitable, scientific and educational purposes, no part of the net earnings of which inures to the benefit of any private stockholder. Montana (c14) exempts corporations or voluntary associations solely religious, charitable or educational from the inheritance tax law.

Indiana (c4 sec5) exempts every building used and set apart for educational, scientific or charitable purposes, the tract of land on which the building is situated, lands purchased with the bona fide intention of erecting buildings thereon not exceeding forty acres, the personal property of the institution, the endowment funds and the interest thereon. Michigan (297 sec9) exempts the personal property of benevolent, charitable, educational and scientific institutions incorporated under the laws of the state. New Jersey (c320) amends a previous exemption including buildings "actually and exclusively used" in the work of the association, the land whereon the same is situated "which may be necessary for the fair enjoyment thereof, and which is devoted to no other purpose and does not exceed five acres in extent," and the furniture and personal property, if devoted to the purposes above mentioned. The act does not apply to institutions conducted for profit but is extended to institutions supported in part by charges or fees, provided the entire income is used for "said charitable, benevolent, or religious purpose."

Public Aid for Hospitals

From one point of view an exemption from taxation is in reality a grant of public funds, a gift of so much money. Some of the states go even further than this and in addition to the exemption from taxation grant the institutions, under certain conditions, funds for the maintenance or

extension of the work. California (c861) gives every city and county or group of counties the power to establish and maintain a tuberculosis ward or hospital for the treatment of persons in the active stages of tuberculosis. State aid amounting to \$3.00 a week for each person therein supported at public expense is granted if the ward or hospital conforms to the regulations of the state bureau of tuberculosis.

Idaho (c141) gives to the boards of county commissioners the power to provide for the care and maintenance of indigent sick or dependent poor, to erect and maintain hospitals and to levy a tax therefor.

Indiana amended a number of laws relating to the operation of public and private hospitals. Under some circumstances if the board of county commissioners of a county finds that it is not provided with adequate hospital facilities, the board may give aid in the construction, equipment and maintenance of a hospital building, not to exceed the sum already provided by such association. (C142) permits the common council of cities of the fourth and fifth classes to make the same appropriations. Cities of 70,000 to 84,000 inhabitants by (c156) may appropriate moneys to support and maintain hospitals not organized for profit and sufficient to enable such hospital to meet the needs of the community.

Iowa (c83) provides that the board of supervisors of any county, in which no county hospital has been established, may in its discretion establish one or more wards in any public or private hospital situated in the county for the use of the county under such regulations as may be agreed. In Kansas (c31) private charitable institutions which receive state aid are made subject to the same visitation, inspection and supervision by the state board of administration as are the public charitable institutions. The state board is to pass on their fitness annually and no institution operated for profit is to receive funds. By (c34) of the same state, on establishment of a city hospital in any city of the second class, the mayor and council or the mayor and commissioners may levy a tax annually in addition to the taxes prescribed to equip and maintain such hospital. (C156) applies the same provision to counties.

New Jersey (c81) amends a previous act which enables cities with no municipal hospitals to enter into contracts for the purpose of supporting, maintaining and caring for indigent patients in any regularly incorporated hospital located in such city.

In Ohio (p77) the board of county commissioners of any county may enter into an agreement with one or more corporations or associations, organized for charitable purposes, for the

purpose of maintaining and operating a hospital in any county where such hospital has been established. This includes institutions organized for the care of the indigent sick and disabled but does not apply to those caring for pulmonary tuberculosis, nor to sectarian institutions.

Management of Public Hospitals

In order to establish or maintain a hospital, a city or county must be given specified power. This may be by special grant or general legislative act applying to all cities or cities of a group. In Nebraska all cities which have attained a population of 100,000 or more may erect, establish, maintain and regulate hospitals, (c116 subd. XVIII). California (c462-466) amends a previous act relating to cities of the sixth class whereby a hospital may be established by the board of trustees; after a petition has been presented to them requesting such establishment and has been submitted in election, and provided further that the city has no municipal hospital.

In Minnesota (c304) cities of the first class with a population of 50,000 or more through their governing bodies may issue bonds and use the proceeds to acquire a site, construct and equip a contagious disease hospital. The same state (c116 and c218) provides for the enlargement of county groups maintaining tuberculosis hospitals and for the division of expense. Illinois (322) altered slightly the previous laws permitting cities and villages to establish tuberculosis hospitals or sanatoriums. North Carolina (c178) provides for the maintenance of county tuberculosis hospitals from general county funds, amending a previous law. In Texas (c42) cities and counties of over 10,000 may establish and maintain hospitals whenever by will or otherwise a fund of \$50,000 has been left for such purpose. The same state (c18) has established a state tuberculosis sanatorium.

Vermont (119) amends a previous law so that the state may establish tuberculosis hospitals or wards for the treatment of tuberculosis patients in connection with any hospital, or may assist in the maintenance of such hospitals when in the opinion of the governor and the state board of health there is need. Indiana (c203) established the James Whitcomb Riley Hospital for the treatment of children. Any child under sixteen may be admitted or may be committed by judges of the circuit, criminal or juvenile court. Wisconsin (c305) established a memorial hospital for the care and treatment of discharged soldiers, sailors, nurses and marines.

A few of the detailed and special laws of only local interest have not been included in this summary.

A HABIT TRAINING SCHOOL FOR THE MENTALLY DETERIORATED

By CHARLES F. READ, M.D., STATE ALIENIST, CHICAGO

THE old saw that we are all creatures of habit is an observation well taken. Man does not come into the world with such instinctive behavior patterns as will enable him to fit into our present complicated social life. The only instinctive reactions he possesses are related to the very simplest expressions of a desire to preserve himself and the species. The baby must be taught the first principles of personal hygiene and the growing child learns the when, where and how of its daily existence only as a result of the mother's patient reiteration. Gradually a considerable number of these acquired reactions sink below the level of strictly conscious cerebration and become more or less automatic. The vegetative necessities of the organism are attended to at regular times and in certain places; the body is bathed, teeth cleansed, hair combed and brushed, clothing properly adjusted, meals taken at certain hours and eaten after the approved fashion of the community, and from one morning to another we carry out in these respects and many others a routine that has become so established as to be what we call second nature. And yet, from sad experience, we all know how easily upset this quite definite routine may be by the interference of unusual events. Even the habits most closely connected with purely vegetative functions easily suffer; constipation is all too easily acquired; and habits of bathing, cleansing the teeth, etc., are apt to suffer when the carrying out of the customary performance is made a little more difficult, that is, when the ordinary reaction pattern is not sufficient to the occasion. It is said that the Englishman in tropical countries shaves and bathes each day religiously, fearful lest the spirit of the jungle shall come to possess him. He is constantly aware of how easy it is to sink to the level of the savages about him if once he lets loose of the sheet anchor of these more fundamental habits.

Regressive Behavior

About one-third of all mental disorders belong to the class known as dementia praecox and occur in comparatively young individuals. Thus by a process of accumulation at least sixty per cent of all mental cases in custody belong to this group. We cannot enter here into the symptomatology of dementia praecox nor its abnormal psychology; suffice it to say that one of the most

constant developments in the course of the disorder is a loss of interest in the things that normally give value to existence, the desire to appear well in the eyes of others, to provide for self and family, etc. As a result of this loss of contact with the world about them too many of these patients return to an infantile type of behavior. Basic habit patterns are allowed to fall into disuse; they become careless of their clothing and often tear it off; are untidy in their personal habits and eat in animal fashion.

In practically all institutions for the insane there are patients of this type who live upon a very low level. And the most astonishing feature of this apparent mental degradation is the fact that in the ordinary acceptance of the term, *there is no actual dementia present*. These patients retain their memories; the essential reaction patterns are still in existence but are not used. Time and again this is demonstrated by the fact that most deteriorated patients in the course of an infectious disease will come back to their old selves quite completely. The old interests return and the old habits of action are assumed almost as readily or even more quickly than they were put off.

Must Arouse Old Interest

Here then we have a definite problem in the care of a large group of the mentally disordered. We must in some measure restore to them their fundamental habits, their old ways of doing fundamental things so that they may again lead a community life, at least in an institution if not in the outside world. For a long time this extreme regression was accepted as rather a necessary evil. It was well known that spontaneous improvement took place at times in certain patients and that industry in general prompted habits of cleanliness, but little organized effort was made to produce this result upon a large scale as a part of a program for the betterment of this class of patients. Only within the last few years have the so-called "untidy wards" of dementia praecox cases been looked upon as an institutional reproach and the habit training of this group of regressives systematically undertaken.

Illinois has been one of the first states to establish a state-wide program of occupational therapy and as a part of this program at the Chicago State Hospital two wards for women, with a

capacity of about 35 each, are set aside for habit training. They are structurally unsuitable but are the best to be obtained. In like manner two larger wards of better construction are used for



Inmates of the "untidy wards" at the Illinois State Hospital at Kankakee have been moved to training cottages, such as the one shown above, where instruction in personal habits is given.

the male pupils. Upon one ward in each group are placed the more promising of the untidy praecox cases; very old cases and cases impulsively violent are excluded. The other ward serves as a promotional one for improved cases. To these wards are detailed intelligent attendants in charge of women of experience and sympathy.

The following program, while elastic, outlines briefly the essentials of this work. It is not sufficient to direct the ward assistants in a general way to see to it that their patients are properly bathed, dressed, specialled, etc. They must be given certain things to do at certain definite times and required to carry these things out to the letter with the understanding that this effort, while necessarily routine in character, actually represents the early development of a movement away from the old time hospital routine.

DAILY PROGRAM IN HABIT TRAINING WARDS

- 6:00 Rising bell. Special, wash, brush teeth, comb hair, lace shoes, dress, air beds.
- 7:00-7:30 Breakfast. Care of the wards for those who are able, make beds, sweep floors, etc.
- 9:00-10:00 Give water, special, care for nails, prepare for class.
- 10:00-11:00 Class work: kindergarten and other simple occupations.
- 11:30-11:45 Put up work and clean up.
- 11:45-12:00 Prepare for dinner, special, wash, etc.
- 12:00-12:30 Dinner.
- 12:30-1:15 Care of teeth, special.
- 1:15-2:30 Story telling and blackboard work.
- 2:30-3:00 Give water, special, tidy up for exercises.
- 3:00-4:30 Gym work on lawn if possible, if not in gymnasium. (Exercises should be simple and varied.) Walk.
- 4:30-5:30 Special, rest and make tidy for supper.
- 5:30-6:00 Supper.
- 6:00-8:00 Music. Patients dance on ward: their minds to be kept as pleasantly occupied as possible.

8:00 All to toilet, wash teeth, brush hair, put to bed with night gowns.

10:00-12:00-2:30-4:30—Night specialling.

Here, as in the case of all "programs" everything depends upon the spirit with which a difficult task is approached. The chief nurse, the occupational aide in charge of occupational therapy upon the ward and the attendants must all be full of confidence that the object in view can be attained in spite of many discouragements. It is easy to write such a program but no one who has not seen it put into practice can realize the pertinacity required for carrying it out successfully; not only pertinacity, but much sympathy and a faith that finds its justification in its works.

Upon the other hand when we remember that we are not dealing with the feeble-minded, although these people behave in many ways like children, it can be more readily understood that this training in the individual case does not always progress in plodding fashion. These patients, as before stated, possess habit patterns that have not been destroyed but have merely fallen into disuse. It is therefore not unusual to see a canalization occur quite speedily and the untidy patient become rapidly, almost suddenly clean and interested in the work of the ward and in the special outlets for interest afforded by occupational therapy. These are the bright spots, the highlights in this work. Upon the other hand there are patients that would test the patience of Job. There are some who never improve or improve only to backslide. Not all recover or improve sufficiently to go home but considerable numbers do, as a result of training, attain to a higher level of living which makes it possible for them to lead a more comfortable, useful life, even though this life may remain institutional in character. Even from this latter viewpoint it can readily be seen that this work is a benefit to the state as well as to the patient, since whatever benefits the individual cannot but realize a public gain. The patient who formerly required in-



The dementia praecox patient in idleness.

cessant care and rendered no service ceases to become in time an institutional problem and may even develop into a positive asset as an industrial worker.

Such is the case of Pauline S. admitted at Chicago State Hospital July, 1920, in a very delapidated mental condition. Unclean in her habits and disordered in her speech and behavior, she entered the habit training class in September, 1920, at which time she had to be dressed by the attendant. She shortly became interested in class work, began to care for herself by combing her own hair, brushing her teeth, lacing her shoes, etc. She was advanced a grade in November and continued to improve rapidly, became a good worker in the occupational therapy class, was finally transferred to the industries in April, 1921, and paroled shortly after upon the recommendation of the medical staff.

The kindergarten work done in connection with habit training is essentially that in use everywhere for child-training and need not be detailed here. It is all arranged for the attainment of a definite end in a specific manner but of course here again we must realize that we are not dealing with children but with adults who are already in possession of unused cerebral pathways and that while at times they do not progress even as a child should do, again they go onward and upward by leaps and bounds.

Some Respond, Others Fail

At Kankakee 106 patients have passed through the habit training ward during the past year. Six were paroled home directly from the cottage, five more went home after being promoted to better wards. Twenty-two patients failed to show results and were finally demoted. Most of these



With habit training, pride in personal appearance is awakened.



A training class at the Kankakee State Hospital.

were women who had been in the institution for more than fifteen years. A few were younger cases who seemed to be incapable of improvement. *Eighty-four were advanced to better wards* where they still are subject to some supervision as to personal habits and where they are occupied during the day. The class building at Kankakee is a singularly pleasant little cottage, skillfully remodelled for this purpose. Unfortunately no intensive work has been carried on with the male patients as yet.

During this same period at Chicago State Hospital 196 patients were treated in the female habit training wards and eighty-seven were improved, ten going home. Good results were also obtained upon the male wards though not so striking because they were not so well organized. For obvious reasons it is more difficult to carry out this work with men than with women and its thorough development comes later.

Facilities for Group Training

Now a word as to the *ideal* arrangement for such work. There should be at least two wards for each sex, preferably cottages of bungalow construction, one for the beginners and another for those promoted. The day room should be large, light and airy with drinking fountain, wash bowl and mirror in the room so that all the patients may be benefitted by observing those who make use of these facilities. The dormitory should not be crowded. There should be no single rooms because all these patients are pretty much on the same level *and the endeavor to train them is a group proposition*. The toilets and bath room should be separate. In the toilet the seats should be separated by partitions to give some degree of privacy and thus foster a return of the proper conventions. Lavatories must be generously supplied. The clothes room should be large and adequately supplied not only with hooks for underwear and dresses but with hangers for outside

wraps, hats, etc. Much can be accomplished, especially with women, by appealing to their dormant desire to appear well. There must be a dining room upon the ward and the tables should be small, seating groups not larger than six each, preferably four. *There must be no crowding anywhere.* The paint should be attractive, even gay, in color, to which other decorations of one kind or another should be added such as wall paper panels, pictures, attractive hangings, rugs, plants, in fact everything that can be assembled to appeal in a wellbred manner to the patients' dormant love for color. There should be a phonograph in the day room with records which are fresh and often changed. There is nothing worse for a patient than the constant use of old, cracked records. Animal pets or canaries should be allowed them if possible.

The foregoing description applies to the male wards as well as the female wards. Both sexes should be supplied with non-institutional clothing in so far as possible. Strong dresses, drab colored dresses, blue jeans, etc., are to be avoided. The extra care given should do away with the necessity of these familiar institutional garments.

Occupational Work for Improved Cases

Upon the promotional wards there should be some more advanced occupation of a therapeutic character, such as wood sawing and sand papering for the men, doll making and simple forms of sewing or weaving, for the women. These occupations, together with the necessary house-keeping that is always to be done, accord a considerable variety of outlets for the patients' energies. And the point to be emphasized is the fact that these activities, together with the habit training, are such as to bring the patient again into contact with reality and to lead him out of his self-absorption back into a measure of normal life. Even though this may remain a more or



From the habit training ward patients advance to occupational therapy work.



In the gymnasium patients are led back to their old habits of play.

less restricted life, to a great extent routine in character, much has been accomplished in that the patient has been rescued from the profound delapidation that is almost inevitable in a large percentage of this class of cases.

A case in point is that of Nora P. of the Chicago State Hospital who entered the kindergarten class in December, 1920, after a residence of some two years in the hospital. She was noisy and very destructive at this time, would sit on the floor and tear her clothing, was dressed and undressed by the attendants and was fed at the table since she would not use even a spoon. In a short time she stopped tearing her clothes and began to take some pride in her appearance. At this time she would spell some words upon the alphabet board but would do nothing else in class. In February she began doing a little work on the ward and to sew some in class. She improved steadily and after six months' training took care of herself and helped with the other patients besides doing any kind of work that was given her to do either in class or on the ward. She is now one of the neatest patients in the ward and a good worker. She has not recovered and very probably never will, but her behavior has improved tremendously and from a hospital liability she has been converted into something of an asset with a corresponding increase of personal comfort. The photographs indicate quite graphically this improvement as well as some of the activities that have led up to it.

No claims are made for the novelty of this idea. It is presented merely for the purpose of emphasizing the manner in which results are to be secured.

In a very well conducted, small hospital, it took a good superintendent three years to convince the board of managers that the training school for nurses should have graduating exercises for the pupils. It also took three years to convince this same board the advisability of having a training school committee.

A NEW COMMUNITY HOSPITAL ON THE WEST COAST

By H. P. WILSON, M.D., CHIEF OF STAFF, MURPHY MEMORIAL HOSPITAL, WHITTIER, CAL.

ONE of the most complete small hospital units on the Pacific Coast is the new Murphy Memorial Hospital at Whittier, Cal., into the construction and equipment of which has gone some \$275,000. Situated on an eminence above the town, Murphy Memorial can boast an inspiring location such as few hospitals possess, with its eastern windows looking out over the verdant San Gabriel valley and with a vista of Catalina Island and the sea toward the west.

Whittier is a city of 10,000 inhabitants with a contributing ranch community of approximately

excellent new hospital is directly due to the philanthropy of Col. Simon J. Murphy, Jr., son of the Simon J. Murphy who brought the first water-ditch to the little settlement of Whittier and who developed about it large oil holdings. The hospital is his son's memorial to this pioneer and promoter.

Eighteen months ago, Colonel Murphy, seeing need for a new hospital in the community, had a complete survey of hospital facilities made, which resulted in his decision to build a thoroughly modern institution. At that time the colonel, himself a



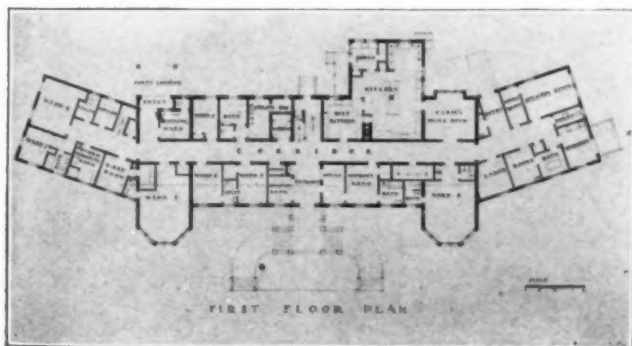
The Murphy Memorial Hospital at Whittier, Cal., with a capacity of 55 beds, has recently been opened.

the same number. It is only twelve miles by highway to Los Angeles and is located in the center of an active oil and citrus territory. Like many towns of its size, it has from its early days possessed inadequate facilities for the care of its sick. Structures built for homes or business purposes have been utilized for a measure of hospital service and in emergencies. In the face of such embarrassments, however, the surgeons had managed to accomplish a great deal of commendable work.

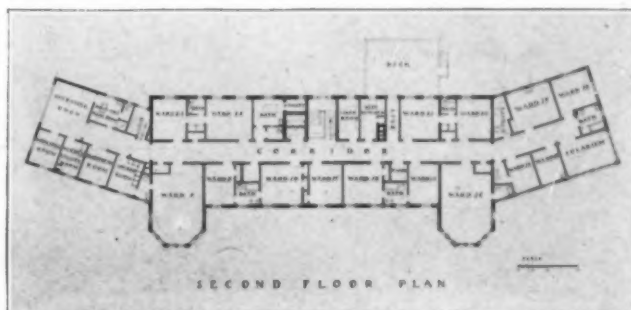
The city's good fortune in now possessing this

chronic invalid, was suffering from an acute exacerbation of his malady which almost cost him his life. Forgetful of his own discomfort, however, he plunged into plans for the hospital and demanded that he be motored daily to the site so that he might personally supervise the work.

The city donated the site, a park of seven acres, and appropriated \$12,000 for the beautifying of the grounds by means of shrubbery and flowers. Churches, local organizations of all sorts and individuals contributed \$15,000 toward the equipment of the institution, and William J. Milhous, a resident of Whittier, placed \$25,000 in an en-



First floor plan.



Second floor plan.

dowment fund. Colonel Murphy put \$200,000 into the structure. In deeding the building over to the city, Colonel Murphy's request was that the hospital be operated at all times as a Class A institution. Accordingly the city council, board of trustees and hospital staff plan to make the institution meet the requirements of the standardization program of the American College of Surgeons and have made provision to meet any deficit that may be incurred. A five mill levy on an assessed valuation of \$5,000,000 will be used to meet any possible deficit and to swell the endowment fund.



Private rooms are cheerful and nicely furnished.

Murphy Memorial Hospital is a two-story and basement fireproof building of reinforced concrete with two wings for surgical and obstetrical work. The first floor of the hospital proper houses the administrative offices. The obstetric unit consists of a delivery room, nursery, two labor rooms, bath and sterilization room. The main kitchen, diet kitchen for the floor, the x-ray laboratory, treatment room and a number of pri-



The men's ward with its many windows open to the sun cannot be depressing.



The major operating room is distinctly modern in its equipment.

vate rooms and wards also occupy the first floor. On this floor, too, is the children's ward of six beds attractively furnished by a member of Colonel Murphy's family. The various rooms open on either side of a corridor which runs throughout the length of the main building and maternity wing.

On the second floor is a complete operating unit with minor and major surgical operating



The obstetrical wing contains the delivery room (shown above) and every facility for handling maternity cases.

rooms, sterilizing rooms, lockers, scrub-up and utility rooms, all furnished in a modern way. These have a north exposure. The chemical and pathological laboratory is on this floor, together with a diet kitchen, solarium, and a selection of private rooms and wards. These likewise open on a main corridor, so that every room in the building receives a measure of sunlight daily. Call and intercommunicating telephone systems with seven stations give splendid service. On this floor there are telephone plugs in every private room.

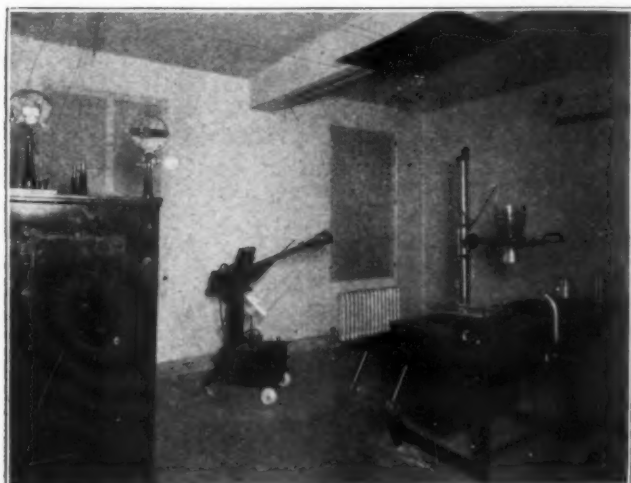
Each room and ward in the building has bath and lavatory facilities immediately connecting.



Where patients' diets are prepared.

Equipment has been largely purchased by churches and organizations of Whittier with the purpose of making it comparable in character to the construction itself. Beds, mattresses, chairs, light fixtures, operating tables, sterilizers, laboratory facilities, and x-ray equipment are of the best type obtainable.

The x-ray laboratory is completely equipped and a bedside portable unit has been purchased.



Murphy Hospital has its x-ray laboratory, which compares favorably in equipment with many larger institutions.

Trained technicians are in charge, their salaries paid by a laboratory fee. These men are equipping the laboratories to furnish complete pathological, chemical and x-ray services. The major operating room is furnished with the most modern apparatus.

The basement is equipped with laundry facilities sufficient to care for the flat work of the institution. A large washer, extractor and mangle do the laundry work successfully and transmit no sound or vibration even to the first floor. Several hotpoints are arranged along one side of the laundry room. Tubs are at the north end.

A water softener and refrigerating plant are in the basement, along with steam generators and boilers for heating and sterilizing purposes.

Believing that the best way to obtain and keep an efficient corps of nurses is to give them proper living conditions, Colonel Murphy erected, under the direction of his own competent nurse, a home for nurses which is supplied with every convenience for their comfort and pleasure.

Accommodations are furnished as well for all the employees of the institution. At the rear of the hospital is a large area laid with concrete



The main kitchen is on the first floor. Ice boxes are built in.

which furnishes a convenient parking place for automobiles.

The community of Whittier, especially its Chamber of Commerce, its council and hospital board, has been thoroughly posted on the necessities and advantages of a modern hospital. It is in sympathy with the standardization program and believes that through organization and good management the yearly deficit may be reduced to the minimum.



The dining room of the nurses' home was beautifully furnished by the wife and daughters of Col. Murphy.

GETTING SUITABLE HUMAN ELEMENTS FOR THE HOSPITAL LAUNDRY

By WALTER TRIMBLE, CHICAGO

AS I have pointed out the necessity of employing none except suitable human elements in the hospital laundry, this brings up the important and difficult questions, "How shall we get them and how shall we keep them?" While a categorical answer is impossible, a few generalities may be of assistance both to the manager of the hospital and to the manager of the laundry department.

Until a few years ago, managers of laundries, including the heads of institutional plants, were, as a rule, satisfied to employ what may be called "the dregs of the labor market," the lowest grade of labor, morally, mentally and physically. Nearly every industry paid higher wages than the laundry, and at the same time had far better working conditions and general environment; hence, the laundry forces, consisting mostly of women, could only be recruited by workers whom other employers did not want.

It became manifest, with the introduction of expensive and complex laundry machinery, that it was necessary to get a better class of workers, and this resulted in some thought being given to scientific employment and the general improvement of the personnel. Simultaneously, the war made it necessary to increase wages greatly—in order to keep laundry workers at all.

Had to Pay Higher Wages

Scientific methods of employing workers, as all employers know, became an impossibility during the period of the war. Laundry managers took what labor they could get and they got out of it what they could; that was not very much, nor was it very satisfactory. Thus, an extremely bad habit was acquired, and it is not being thrown off as rapidly as it should.

But laundry managers learned one thing and that was, to pay higher wages and thus compete with employers in other lines of business. After interviewing scores of laundry operators I have

To get and keep suitable human elements in the hospital laundry, Mr. Trimble suggests that managers should be willing: To pay reasonably high wages; to fix an eight-hour working day with a half holiday on Saturdays; to allow ten-minute rest periods each morning and afternoon; to provide a dining room in which employees may eat their lunches; to serve hot lunches at cost, or if this is impracticable, to serve hot tea or coffee; to maintain a small emergency hospital with a trained nurse or some department where first aid may be supplied; and to convince all employees that the object of personnel work is business efficiency, not charity, its sole purpose being to obtain efficiency and good will.

found that in this field there is no tendency to drop back to pre-war wage schedules. These employers now realize that reasonably high wages are necessary, even in these times of much unemployment, if working forces of high-grade labor are to be secured and kept intact.

The amount of the stipend is, of course, the most important consideration, but there are things other than wages which have a direct bearing

on the matter of building up an efficient personnel in the hospital laundry. When a person applying for a position is told that one is open, invariably the first question put to the prospective employer is: "What do you pay?"

Then, if the wage suits the applicant, the next question, as a rule, will be, "What are your hours, and is there a Saturday half-holiday?" Most laundry workers now want an eight-hour day, with the week closing at noon Saturday, and a lot of them—the best ones, I might add—are getting it. And they do not want to work overtime, either, at any wage.

Allow Shorter Working Hours

I talked this matter over with several hospital managers and I found they did not seem to realize that workers in the laundry department look on the matter of hours as an important thing. It was generally thought that because nurses have been used to long hours, with much overtime in emergencies, and as a rule have been quite patient in the matter, laundry workers, who are mostly women, would be contented with the same conditions. In other words, it was assumed that all women think alike.

But we must remember that here we have two distinct classes, with different training, different customs and different social traditions. The psychology of the trained nurse is not that of the worker in a hospital's laundry; what one will patiently put up with, as a necessary part of her chosen career, will drive the other away. It is

important that the hospital manager take this into consideration, realizing that the labor problems of his laundry manager differ in a great degree from the personnel problems of the hospital executive.

Value of Personnel Work

Twenty-five or thirty years ago, or perhaps back further than that, somebody coined a most unfortunate term, "welfare work," for a most praiseworthy pioneer effort to better the condition of workers. The independent and self-respecting American worker, as often has been shown, resents all efforts of "welfare" work because it sounds too much like charity. However, the work is needed, and therefore we must look around for an acceptable name for it,—one that at least will not be taken as an insult by its intended beneficiaries.

"Personnel work" is a term that appears to answer the purpose very well, and as it seems to be inoffensive to workers, I see no reason why it should not be adopted. At any rate, we need a standard name for this necessary work, so that all may become familiar with it,—a name that the employer may utter without fear of offending his employees.

The object of personnel work, it should be impressed on all workers, is not charity. They should be diplomatically informed that personnel work is done as a business proposition with the sole desire of getting the greatest possible efficiency, good will and cooperation. Let it be known to all that every time you, as head of the hospital, spend a dollar on personnel work, you expect the institution to get it back plus a reasonable amount of interest. Give the workers to understand that it will both please and benefit them, but that this is not its primary object, and assure all that it puts them under no obligation to you or to any other person.

Its Practical Applications

A great many operators of commercial laundries have found that it increases production and incidentally improves the quality of work to have a ten-minute rest period in the middle of the morning and a similar period in the middle of the afternoon. Such periods of relaxation do much to keep up the morale of women workers. It should be remembered that the period of relaxation is not lost time, but on the contrary it results in an appreciable increase in production and improvement in quality.

It is an excellent plan to provide a neat, clean, comfortable dining room in which workers may eat their lunches, so that they need not sit around the machinery and work-tables while eating. All plants cannot provide warm food for the

workers at cost but all can provide hot tea and coffee at noon.

I wonder how many hospital managers have made provision to take care of their laundry workers in case of accident or sudden illness. Many commercial laundries maintain a small emergency hospital with a trained nurse in charge. There are not many accidents in a laundry, for laundering is not a hazardous occupation, but when an accident does occur it may be very distressing. Workers, especially women, are subject to sudden attacks of illness, which, with proper attention, may soon pass off, and for this reason the operators of commercial laundries find that a first-aid department, with a trained nurse in charge, does much to reduce the time lost from this cause. In almost any hospital the injured and ill persons could be given quick attention, with practically no expense involved, but I never have seen special provision made in a hospital laundry for such care.

The foregoing are a few of the things that make it possible to get suitable human elements in a hospital laundry, to keep them contented and to improve their morale. The world looks on the hospital as its greatest humanitarian institution, and I am sure that all will agree with me when I advocate humanitarianism for the hospital laundry.

BUSINESS METHODS AID HOSPITAL


Charing Cross Hospital, London, reports that the past year demonstrates the remarkable success of the system of voluntary payments. This hospital, however, occupies a unique position among the hospitals of Great Britain, in that, instead of being in debt, it has a balance of more than \$18,000. This has been achieved by the introduction of business methods and organization. It was not long ago that Charing Cross was in the same situation as other hospitals, owing a large amount of money and running constantly further in debt. Then Mr. George Varity, a business man who had no experience in hospital management, was persuaded to undertake the management of the hospital affairs. He consented to try the experiment, and by the introduction of energetic and original business methods, as if by magic the hospital was transformed into a prosperous institution. This goes to show what can be done by the introduction of business methods into hospitals.

BOXING CARNIVAL FOR BRONX HOSPITAL

Fight fans of New York became contributors to the Bronx Hospital when proceeds of a monster boxing carnival at Madison Square Garden on November 29 went to benefit the hospital.

The star bout on the card was between Benny Leonard, lightweight champion of the world, and the welterweight champion of New Jersey, George Ward. "Tex" Rickard promoted the bouts.

Between the pictures of Benny Leonard on the cover of the official program and "Tex" Rickard of the Garden at the back were pictures and printed information regarding the hospital and the need of the \$300,000 addition which is being built.



The
MODERN HOSPITAL

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SUBSCRIPTION

Domestic postage, \$3.00. Canada, \$3.50. Foreign, \$4.00.
 Single copies, 35 cents. Annual Review Number, 50 cents.
 Domestic rates include United States, Cuba, Mexico, Porto Rico, Canal Zone, Hawaii and Philippines.

MENTAL DISEASE AND FACILITIES FOR TREATMENT

WHY is it that national interest, not to say hysteria, may be aroused in a campaign for the care and treatment of sufferers from physical diseases but none can be stimulated in behalf of the mental or nervous patient?

The country has been swept with a perfect hurricane of effort in behalf of the tuberculous. Large sums of money are raised each year through solicitation and sale of Christmas seals to support the work of treatment and prevention in the field of tuberculosis. Sanatoriums in large numbers have been erected, on both the state and county support plan. Scores of cities have well organized dispensary, out-patient and nursing service, devoted to tuberculous patients and the suppression of this disease. So with other physical diseases, whose ravages we are wont to portray in terms of dollars and cents.

But what about mental disease?

Horatio M. Pollock, statistician of the New York state hospital commission, states that the "burden of mental disease is each year becoming heavier." State hospitals are cruelly overcrowded in every state and it seems that most of them have given up as hopeless the task of furnishing adequate, decent room to these sufferers.

Mr. Pollock says, "A fairly complete census shows that the number of patients with mental disease under treatment in institutions increased from 74,028 in 1890 to 432,680 in 1920. The rate per hundred thousand of population increased from 118.2 to 220.1. Careful estimates based on statistics of the New York state hospital commission indicate that approximately one out of twenty-five persons becomes insane at some period of life."

He estimates the cost of these patients and the economic losses through their helplessness at \$200,000,000 a year.

It must be kept fresh in mind that these figures relate only to that disease which is commonly known as insanity. Feeble-mindedness, epilepsy and psychopathic states must be estimated separately but at no less figures than those given for insanity.

Against this deluge of mental disease little opposition is offered. State hospitals that pretend to be more than mere places of detention are rare. Research into causes and preventive methods is limited to a few psychopathic institutes, ill supported by their states. Local dispensary or out-patient service, either under the auspices of a state hospital or of a mental hygiene society, is found in only a few places. The public is densely ignorant of the meaning of mental health or of the principles that underlie it.

No less should be done in behalf of the physical sufferer or to stamp out physical disease than is now done, but certainly the proportions of mental disease and their drain upon our economic and social resources suggest radical measures to arouse and enlighten a complacent public.

CARE OF SICK NOT HOSPITAL'S SOLE PURPOSE

EVERY now and again, at hospital conventions and elsewhere, one hears it said that the care and treatment of the sick is the sole purpose for which hospitals exist. Is this an accurate and comprehensive definition of a hospital's purpose?

THE MODERN HOSPITAL does not believe that it is. The care and treatment of the sick, broadly conceived, involves a number of important factors, all of which must be made a part of the aim and object of every hospital that is living up to the full measure of its possibilities. It goes without saying of course that the sick who enter hospitals should be safely housed, occupy comfortable beds and receive appetizing and nourishing food. The specific and compelling reasons, however, why the sick resort to hospitals is that they may be treated by well informed physicians and

skillful surgeons, that they may have the benefit of such diagnostic facilities as can be had only through thoroughly equipped laboratories, manned by well trained scientists and technicians, and that they may have skillful nursing service.

But where are these doctors and surgeons, scientists, technicians and nurses to gain their training and experience? Some of it in the medical and nursing schools; mainly, however, through the practical work which they do in the hospitals. So greatly indeed do these workers depend on the practical education they receive in the hospital, for their skill in the care and treatment of the sick, that this education, far from being a by-product, takes its place beside the actual care and treatment of the patient, as one of the hospital's principal functions.

And what of the research work which so many hospitals have carried on so successfully, and which has had such a marked effect in improving the treatment of patients everywhere?

While it is conceded, then, that the care and treatment of the sick is the first concern of every hospital worthy of the name, it is not, as is so frequently declared, its sole concern. Were the latter true, and were hospitals to relegate their educational, research and preventive work to the class of by-products and emphasize them accordingly, it would be a sad situation for the sick.

REGIONAL HOSPITAL ASSOCIATIONS

AT a recent meeting held at the Medical Library in Boston to consider the advisability of organizing a New England Hospital Association, a plan of regional organization was presented by Dr. A. R. Warner, executive secretary of the American Hospital Association, which in our judgment is worthy of serious consideration and early adoption by certain sections of the hospital field. The fact that the plan was not at this time adopted by the hospitals in New England, where it is felt that state lines are not so sharply drawn as elsewhere in the United States, does not in itself argue against the adoption of the plan in other sections of this country.

During the past seven years seventeen or eighteen state hospital associations have been formed and several other state groups are now seriously considering the question of organizing associations, and applying for membership as geographical sections of the American Hospital Association. There are some states, however, that would like to organize state associations, but they feel that there are not enough hospitals within their confines to make possible a strong association with well-attended annual or semi-annual meetings. To two or more contiguous states that find

themselves in this position Dr. Warner's plan offers a way out. He proposes that the hospitals of adjacent states, all or the majority of which feel that the organization of state hospital associations as separate and unassociated bodies is for the present at least out of the question, shall nevertheless organize as separate state associations, and at the same time shall call into being a council, made up of two or three delegates from each of the state associations, this council to be the correlating and controlling body of the state associations in the group, and authorized to transact such business for each and all of the states as should be delegated to it. A joint annual meeting of the state associations in the group would be held under the auspices of one of the state associations, officers of which would prepare the program and preside over the general sessions. At the annual meetings there would be separate meetings of each of the state associations under their own officers to discuss problems of distinctly state interest and scope, just as at the annual conferences of the American Hospital Association there are separate meetings of various sections where problems of peculiar interest to these sections are discussed. General sessions would also be held for the consideration of subjects of common interest and bearing.

As Dr. Warner points out, the idea of sectional hospital meetings is by no means new; in fact the Southern Hospital Association is now in existence. What is new in the idea here proposed is the joint organization of several state associations, all of which are geographical sections of the American Hospital Association, a relationship which secures greater stability and more sustained interest.

We commend the plan to our readers for consideration and believe that there are several groups of states that would profit by its adoption.

LEAVING A TRAIL OF GOOD WILL

A NEW standard of community giving for hospital purposes, but one widely attainable if wisely approached, was recently established by Elliot Hospital, located at Keene, N. H. This hospital went to the public for \$225,000 for a new building and received \$273,465 from 4,962 subscribers, an oversubscription of twenty-one and one-half per cent. The campaign in which this money was raised is described in detail on page 122 of this issue, and carries an exceedingly important lesson for all who contemplate raising funds for new or enlarged hospital construction. This lesson is that generous and wholehearted giving must be based on a warm interest and this interest must be aroused by telling the public in terms that it can easily understand what the

hospital is and what it does. In a word, the public must first be educated before it is asked to sign a subscription blank.

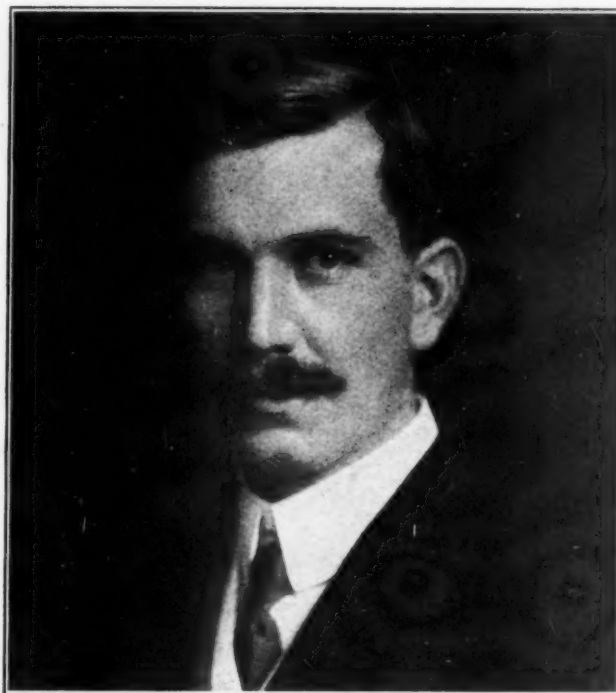
Doubtless much of the preliminary educational work of the Keene campaign could have been dispensed with had the Keene Hospital been in the habit of telling the public year in and year out what it was doing, but like most other hospitals it apparently had not been in the habit of conducting a year round publicity program. Consequently it resorted to the next best plan and conducted an intensive campaign under the guidance of trained and experienced organizers. "It was realized," says Mr. Robert T. Kingsbury, chairman of the executive committee of Elliot Hospital, "that the success of the movement depended upon the thorough education of the public in what the existing hospital had done and was doing, in the growing need of Keene and the county for more adequate hospital service, and in the necessity of building a larger new hospital if the health needs of the county were to be met with reasonably adequate facilities." In this educational process resort was had to the newspapers, circulars, maps, letters, the Chamber of Commerce, the women's club and other organizations, and to a staff of public speakers who addressed fraternal organizations and spoke at motion picture theaters and other places of public assembly, all in an effort to educate the public about the hospital and its needs.

Once the public was thoroughly aroused, coercive measures to obtain subscriptions were unnecessary; browbeating was conspicuous by its absence. The movement was fundamentally an appeal to reason and the response to the appeal was generous.

But while the education of the public is fundamental in the success of any financial campaign, perhaps the real secret is to be found in the concluding words of Mr. Kingsbury: "From the very first days of planning we went forward with the determination that the immediate raising of a fund was not our ultimate goal. That we should blaze and leave behind us a trail of good will, always leading to a vision of closer community spirit and civic advancement, seemed equally important. And now, three months after our success, the raising of the fund almost pales before the greater, intangible brotherhood of Cheshire County, of a greater good will between city and towns than has ever existed."

The end of all political struggle is to establish morality as the basis of all legislation. Morality is the object of government. We want a state of things in which crime will not pay; a state of things which allows every man the largest liberty compatible with the liberty of every other man.—Emerson.

TOURO SUPERINTENDENT PASSES AWAY



Arthur Bramble Tipping.

ARTHUR BRAMBLE TIPPING, for twelve years superintendent of Touro Infirmary of New Orleans, died of pneumonia on December 30 at his home in Bay St. Louis, Miss. He was stricken a few days after his return from the North and East, where he had visited a number of hospitals to gather data in connection with plans for an additional building to be erected at Touro.

Mr. Tipping was born at Portsmouth, England, on June 30, 1879. He volunteered for service in the Boer War and spent six years in the Quartermaster's Corps of the British Army in South Africa. He came to America in 1906 and engaged as a chartered accountant in the employ of an English firm in Canada. From Canada he went to Chicago to help inaugurate a new system in Michael Reese Hospital. He became the assistant superintendent of that hospital in 1907-08 and thence went in October, 1908, to New Orleans to take charge of the Touro Infirmary. He quickly won the confidence and friendship of the administration and medical staff of this institution, and, with characteristic energy began the improvements and additions which have greatly expanded the efficiency and scope of Touro's work. Recently it was decided that a new building was necessary to care for the growing demands of Touro Infirmary. Definite plans awaited his report on the new suggestions and ideas that he had gathered in his visit to the hospitals of Chicago, Detroit, and other cities.

Mr. Tipping is survived by his wife, formerly Miss Katherine V. Dolan of Philadelphia, who was superintendent of nurses at the Touro Infirmary, and two sons.

The superintendent was known to be a man of attainment in his chosen vocation and was a recognized authority in matters related to hospital administration. He took a keen interest in all philanthropic enterprises, whether local or national. He participated in the hospital reforms instituted by the American College of Surgeons and the American Hospital Association, of which he was formerly a vice-president. He was recognized throughout the South as a progressive administrator of rare ability.

A PLAN OF ORGANIZATION FOR THE NEW ENGLAND HOSPITAL ASSOCIATIONS*

BY A. R. WARNER, M.D., EXECUTIVE SECRETARY, AMERICAN HOSPITAL ASSOCIATION, CHICAGO

HOSPITAL associations like other social organizations are controlled and moulded by the fact that they are made up of human elements. It is foolish to expect anything different. This makes it wise at this time to review the principles which have generally produced successful social organizations and on the other hand to note the fundamental conditions which lead to failure.

The principles which are always found underlying and guiding all permanent and useful organizations are clearly defined.

(1) It is required that there be strictly common basic viewpoints and interests in the emphasized activities and no real conflicts in any activity of the organization. every executive secretary quickly learns that this principle absolutely controls and directs the successful activities of any association.

(2) It is also required that the organization fill a definite need not within the legitimate scope of any other organization and that it promptly develop positive usefulness. In these days of a multiplicity of associations and societies none—except perhaps the promoters thereof—joins an organization for the thrill of initiation or for the joy of getting his name on a new roll. The novelty is gone. Organization is now merely a way to do something better and faster than it would otherwise be done.

(3) This requires that the plan shall in advance convince all of the groups it aims to unite that the organization will properly represent and promote their views and their interests. Few indeed will join any organization to reform it; it must meet with their approval *first*. Practical results must also be apparent.

The proposal to create a New England Hospital Association should be considered in the light of these principles, especially the exact plan of the organization. Such an association under any plan of organization would undoubtedly meet the second requirement. It would fill a definite need and promptly develop usefulness—at least in as far as its influence would reach through membership or attendance. The general purpose would be the same as the American Hospital Association, but it would supplement and contribute to its work. There is a distinct and an added value from the supplementary and local aims of the organization.

It must be recognized that every hospital worker can not attend the conference of the American every year, however valuable these meetings may be. It must be recognized that those who attend the meetings of the

American can receive added benefit from attending another hospital convention even in the same year, especially if this second convention shall discuss local and sectional problems.

But the simple plan of organization whereby a New England Hospital Association attempts to unite by voluntary membership the hospital workers of all the New England states into one association can never be successful. It is in direct variance with both the first and the third principles and the plan should be modified to meet them.

The facts are as follows: The working conditions of hospitals vary sharply in the several New England states through differences in laws and other factors. If this

association were to attempt to discuss local hospital problems which the American Hospital Association has never discussed and can never discuss satisfactorily (and it must do this to develop the benefits of a state association), it must either take these up by states one at a time or resolve itself into state sections. The first alternative is objectionable because there must always be present a majority of persons not directly interested. The problems would not be common. The second alternative is weak because the sections could never have final authority to decide and to act.

In making these statements it is not assumed that these discussions shall always

be merely a relation of conditions as they exist and laws as they have been passed but rather discussions to determine what the conditions shall be and what laws directly affecting hospital work shall be passed. In other words it is assumed that organized hospital interests shall take an active part in the formulation of legal and other hospital health programs of the future. These programs must necessarily be developed by states.

Massachusetts Leads Numerically

The hospital field in the New England states from which all membership and support of the association must come is about proportional to these figures:

Maine	Has	60	hospitals and	5,169	hospital beds
New Hampshire	"	68	"	4,683	"
Vermont	"	38	"	3,084	"
Connecticut	"	88	"	13,899	"
Rhode Island	"	51	"	6,643	"
Totals of all except Massachusetts		305	"	33,478	"

Massachusetts has 392 hospitals and 44,573 hospital beds which is more than all the rest of New England together. It is, therefore, reasonable to presume that the Massachusetts members will always be in the majority

TO ACCOMPLISH the satisfactory working organization of the hospitals of the United States and Canada there is needed—

(a) Local (state or provincial) associations to deal directly with situations and factors caused by legislation or other local conditions.

(b) Live hospital conventions in various sections of the country each year to bring the benefits from general discussions to more persons than can attend the annual conference of the American Hospital Association.

(c) A plan to carry a state or provincial association through a year not made active by either interest or anxiety over pending legislation and to eliminate that attitude toward its conventions best described as the usual attitude toward "local talent."

(d) The organization of all these associations and meetings as integral parts and sectional meetings of, and actively supported by, the American Hospital Association.

in the association. This seems really serious and at once to introduce factions more fundamental than the association; for a Vermonter before he joins this association will remain a Vermonter afterwards, quite unaccustomed to acting with and by the consent of Massachusetts.

A New England Hospital Association formed by unlimited and voluntary membership from all of the New England states would carry into its organization factions drawn on state lines and kept up by state legislation, state problems and state activities. It would have one of these factions forever in control of the association by right of vote and by power of greater support both financial and professional. It would make delegations from the other states subservient to the majority from the one state. If the history of New England teaches us anything, it should inform us that New England is the last place in the whole world where such a plan of organization would be practical or could long exist.

Idea of New England Council

We all have a high regard for the wisdom of the personnel of the Massachusetts hospitals but we can scarcely believe that its decisions and voting would always be entirely satisfactory to all the other states. If it is not, the dissatisfied minority will simply drop out of the association. This is all it can do. Eventually this will leave a New England Hospital Association in name and a Massachusetts Association in fact. It is better to recognize this now and draw the plan of organization so as to prevent it; it is possible by a modification of the plan to avoid all of these difficulties and still retain all the advantages its promoters have hoped to receive.

In our opinion the following plan will accomplish this:

Each New England state should form a state hospital association to become a separate association and as soon as fully organized become a separate geographical section of the American.

There should be formed a correlating and control body, known perhaps as the New England Hospital Council, formed by two or three delegates from each state association. This body would correlate and promote the organized hospital activities of all the New England states; would represent and transact such business for each and all of the associations as should be delegated to it. It should elect its own chairman.

A joint annual meeting of the associations of all the New England states should be held somewhere in New England under the auspices of one of the state associations. The officers of this association should prepare the program and preside over the general sessions. This meeting would be known as the annual convention of the New England Hospital Association.

The time and place of each annual convention and the selection of the association to assume responsibility therefor should be determined by the council. Any expense of the meeting could be assessed by the council on the associations in proportion to their membership.

At each annual convention there should be separate meetings of each association under its own officers to discuss satisfactorily the specific problems of each state as well as joint sessions for the discussion of topics of common interest and bearing.

This plan of organization would not only avoid all the difficulties of the other but give additional advantages. The principal object of the association would be assured a greater success. More people would be attracted to the annual convention especially from states other than Massachusetts.

It is the history of all state associations that marked

growth in membership comes from interest or anxiety over proposed legislation. It is then that the advantages and increased power in organization are best appreciated. Each of the state associations will from time to time gain from this as a common New England Association would not. On the other hand many of these same people will fail to attend a state meeting, thinking it unimportant when there are no active state issues. The larger meetings would provide for them the necessary interest and attraction. The general attitude toward the joint convention would be more like that toward the conferences of the American.

It is the history of state associations that membership falls away rapidly as the particular motive for joining is ended. But it is now clear that this is prevented and equalized by linking the membership in state associations with membership in the American. Gains are thereby held.

The state associations—other than Massachusetts—would be small but amply large enough to maintain an organization meriting recognition as a geographical section of the national association. The real disadvantage of a small state association—which is the correspondingly small annual meetings—is by this plan avoided. The joint conventions would always be live meetings, attractive and instructive, and would quickly become of more than local importance. On the other hand there would always be the state section meeting and organization to discuss and handle the local problems arising in each of the states.

Would Mean Live Annual Meeting

This plan offers to the states of other sections a way out of their difficulties. In practically every state there is a group of live active hospital people who realize that the organization of their small group can be as powerful in their state as the larger group of a larger state, but the picture of the small annual meeting has held them back.

This plan meets that difficulty and in addition brings to their section of the country a live general hospital convention which will go far in compensating those who can not get to the conference of the American.

These sectional joint state conventions would merit every possible aid from the American to make them all that hospital meetings can be. They would be most valuable aids in accomplishing a fundamental aim of the American—that of serving as a means and a medium in the widest dispensation of the information concerning hospital progress.

The idea of sectional hospital meetings is old but the idea of organizing them as joint meetings of several state associations is new and came to the writer first from the president of a small state association. To him it seemed to offer a solution of the difficulties of his association and to open the door upon a better day. It is his plan to organize his section of the country in this way and promptly. Beat him to it.

TO HONOR PASTEUR

In 1923 will be celebrated the Pasteur centenary. The celebration will take the form of an international exhibition of hygiene and bacteriology and will be held May 1-October 31, 1923, at Strasbourg where Pasteur began his research activities. The University and city of Strasbourg, the Pasteur Institute of Paris and the Pasteur family will have charge of the celebration. A monument to Pasteur will be unveiled during the exhibition.

HOSPITALS AND PUBLIC HEALTH IN URUGUAY

By ALEJANDRO F. SARACHAGA, M.D., DIRECTOR OF DEL HOSPITAL PEREIRA ROSSELL, MONTEVIDEO, URUGUAY, S. A.

IN CONSIDERING the sanitary conditions of Uruguay, special attention should be given to the "Hospital Pereira Rossell," which is our newest, most modern, and most hygienic hospital. It comprises, first, a lying-in hospital, where the most up-to-date methods of obstetrics are used, which is in charge of Drs. Pouy Orfila and Turenne, both professors in the School of Medicine in Montevideo. Each patient is charged \$1.59 of our money (national gold currency). The institution has 160 beds, it is supplied with steam heat, and all windows and doors are screened. There are isolation wards for infectious cases, special wards for those who come from outside with suspicious diseases, and every possible antiseptic precaution is observed. Every patient who enters the hospital is given the Wassermann test. The hospital has the following equipment; an x-ray and two other laboratories, a large amphitheater for practical work, up-to-date apparatus for the microphotographic projections, etc., and six operating rooms equipped with every surgical appliance for all lines of surgical work. During the year 1919, there were 2,447 patients and 1,359 births; 2,889 women came to the dispensary. One hundred and eighty-seven major operations were performed, the average mortality for the year being 1.75 per cent.

The Practice of Obstetrics

Patients come to the polyclinics which are held every morning. Generally at the end of the ninth month they are given notice, through a simple procedure, to come to the hospital. Between the seventh and the tenth day after childbirth the woman is discharged from the hospital. When a patient, who has no sign of pathological trouble, wants to be attended at her home, if the best hygienic conditions prevail in the home, she is given a card with the address of a midwife who lives nearby, and who will attend the case. When there is an urgent call from a patient, a midwife is either sent immediately by automobile from the hospital to attend the childbirth, or arrangements are made to bring the patient to the institution. This kind of outside work, extending into private homes, in connection with some of the work which is done by the services of the "Servicio de Protección Maternal" (Maternity Protection League), which is in the charge of Professor Turenne, is duly registered. The physician in charge, or his associates, watches the homes and to collect her salary the midwife has to give the hospital the whole clinic history of the case. The results have always been good, with no mortality from puerperal infections.

In addition to the lying-in hospital, is the Hospital for Children. This, which is under the charge of Dr. Merquie, professor in pediatrics, is the seat for the pediatric clinic of the faculty of medicine. The surgical work is active and many operations are performed under Dr. de



A view of Hospital Pereira Rossell, showing the boys' pavilion.

Peña. The department for children will soon be enlarged, due to the generosity of Mr. Alejo Rossell y Rios, a philanthropist of Uruguay, who bequeathed for this purpose a sum which draws \$5,000 interest per annum.

Very soon the "Hospital Pereira Rossell" will have a department of gynecology. It will be under Drs. Pouey, Bottaro, and Blanco Acevedo, professors of gynecology. The building, which was designed by the famous architect, Ebrard, has four pavilions, eight wards for

160 patients, ten surgical wards, a large place for polyclinics, laboratories, x-ray apparatus, rooms for doctors and students, steam heat, up-to-date lavatories, and sun parlors, from which can be seen a beautiful panorama of the city. The equipment will include thoroughly modern surgical appliances costing \$500,000 for all lines of surgical work. We have for the service of the hospital a number of trained nurses educated especially for this kind of work in the school for nurses, which is conducted by Dr. Nery.

Most people who come to the hospital or dispensary are poor, and only a very few pay even a small amount. The food is abundant and wholesome, the rooms well furnished, and the linen clean. The institution has its own laundry, and a pharmacy well equipped for any kind of an emergency.

Public health service in the Republic is supported by three free entities: The National Public Assistance, the National Board of Health, and the Municipalities.

The National Public Assistance owes its existence to the fact that according to a law of November 7, 1910, "Everybody who is poor and has no means, has the right to free assistance at the expense of the state." The high officials of the organization are the general director, Dr. José Martirené, and a counsel of nine members. The annual expenditure is about four million pesos, which comes from rent taxes. With this expenditure fifteen institutions are regularly supported, and this is increased to twenty-two in time of war. Besides this, the x-ray institute conducted by Dr. Butler is supported. This institute has one-half a gram of radium and is equipped with all modern apparatus.

The duties of the National Public Assistance are: Assistance to the sick and insane; protection of old, forsaken, and helpless people, who have by law, a pension of \$8.00 a month from the state; guardianship of forsaken children; assistance and protection to mothers and babies. A free laundry is also maintained to do the work of some institutions. There is a prophylactic institute for syphilis, with which several dispensaries are connected, and where everybody receives treatment, rich and poor alike. We are combating syphilis to the utmost. This campaign was undertaken at the senate by Dr. Alejandro Gallinal, and the treasury supplies all the departments, buying directly from abroad.

The department of first aid and domestic service is in charge of a head physician, Dr. Lorient, one physician inspector, twenty-seven physicians, and eighteen practitioners. There is one main center with branches all over the city.

The Asylum Dámase Larrañaga is an institution to protect and shelter children who are abandoned or deserted for some reason. The children are placed temporarily at an orphan asylum, and when they are in good condition each child is given to a nurse who receives \$12 a month for its care. Inspectors frequently call to see the children or watch them at the dispensary. After a certain age, they are sent to an asylum where they are educated by graduate teachers. Many are later adopted by families, but are always under the care of the protective league of the state. Other children go to different institutions which are supported by the state for a full education.

National Committee of Health

The National Committee of Health is an independent entity having control of the sanitation all over the country. It is the high authority of public health. The nineteen departments or counties, into which the country is divided, each has a health department of its own, but all are under the National Committee on Health. Physicians are also under this department.

The "Lazareto de la Isle de Flores" (The Isles Asylum) is also under this committee. The Republic of Uruguay never refuses to any ship the entrance to her ports, and there is no quarantine.

One of the most important duties of the National Committee of Health is the control of venereal diseases. The antivenereal campaign among us is very well organized. Uruguay holds the first rank in the Latin-American countries, according to Dr. Emilio Ceni, in regard to the campaign against tuberculosis, alcoholism, and venereal diseases. In order to fight syphilis, a tax of one cent to the hectara (10,000



Latin American nurses at the new Montevideo hospital.

square metres) has been charged for all pasturing land, and the legislature has passed a bill for \$30,000 a year to buy medicines. The results, according to the statistics for fifteen years, are good. The National Committee of Health, of which Dr. Vidal y Fuentes is the president, is composed of seven physicians.

The department of hygiene depends on the municipality. The hygienic conditions of the city of Montevideo are very good; there is a large sewerage system, and the drinking water, coming from a place thirty-six miles from the capital, is of the best quality; consequently the mortality is very low. Exotic diseases, such as yellow fever, bubonic pest, etc., cannot be propagated. Small-pox is almost a curiosity, partly due to the fact



Little patients convalescing under a spreading shade tree. In the background may be seen a section of the boys' pavilion.

that vaccination is compulsory.

Puericulture is a subject to which we are giving much attention. Through the efforts of the general director of the public aid, the legislature voted a protective law for infancy, which is practically similar to the French Rousell's law. It is, in essence, vigilance for the care of children under natural alimentation. The new department for this work will be in full action early next year under Dr. Bauzá. The methods will be based upon the other already experienced dispensaries of the "Asylum Dámase Larrañaga." In connection with the League of Tuberculosis there is an open air school for feeble children. It is a beautiful country-seat near Montevideo, and it has a great reputation all over the country for the good results which it has obtained. The private institutions, "Pro Matre," "Bonne Garde," "Protection a la Joven," and "Talleres de Don Bosco," do a very useful work in taking care of children's health and education. We had this year the second convention of child health workers, presided over by the eminent pediatricist, Dr. Luis Morquio.

The two departments of school and military hygiene are in charge of the secretary of public instruction and the secretary of war, respectively.

The National Institute of Health, of which Dr. Berta



The solarium of the gynecological pavilion.

is president, is under the control of the Board of Medicine. It was organized in 1897 by José Sanarelli, distinguished Italian, who was the first president. Vaccine, and prophylactic and curative sera are prepared here. The legislature recently passed a bill for \$300,000 to increase its equipment.

The school for nurses, organized and conducted by Dr. Carlos Nery, has a big hospital pavilion where the students receive technical and practical instruction.

The antituberculosis campaign, which has been carried on for many years by the Tuberculosis League of Uruguay, was started by the well known hygienist, Dr. Joaquín de Salterain. It is supported by the people and the government. There are many dispensaries all over the

country, where the consumptive, both incipient and well-advanced cases, receive every care.

A strong campaign against cancer and hydatid cyst has been organized and is conducted by a committee of physicians, who hope to decrease the large mortality from these diseases. Committees have been organized to fight the alcoholic danger and on the initiative of Senator Naranjo, prohibitory laws have been passed.

Several new buildings are planned. A large polyclinic hospital with 500 beds will be erected by the Public Assistance; a maritime hospital has been made possible through the generosity of Dr. Asejandro Gallinal, a philanthropist of Uruguay; and a "Colony for Convalescents" through a gift of \$300,000 from Mr. Justavo Saint Bois.

THE RELATION OF THE PRIVATE PAVILION TO THE HOSPITAL WARD*

By E. H. LEWINSKI-CORWIN, PH.D., EXECUTIVE SECRETARY, NEW YORK ACADEMY OF MEDICINE, NEW YORK CITY

THROUGH private generosity, taxation and business investment, hospitals have multiplied till, at the present time, we have 32,000 hospital beds in New York City. This includes beds of all kinds, for acute as well as for chronic cases, in public as well as private hospitals, general and special, philanthropic as well as proprietary or commercial hospitals. On the basis of 6,000,000 population, we have one hospital bed for every 200 persons, which is generally considered as ample provision, particularly when the various studies made in the past indicate that not more than ten per cent of the sick go to hospitals.

How many sick people do we have in New York City all the time? This would seem a natural question to ask when the adequacy or inadequacy of hospital provisions is being considered. Unfortunately, there is no way of answering this question accurately except with reference to the several reportable diseases, as we do not possess complete morbidity data for the community. In recent years, however, numerous studies of sickness prevalence have been made by the means of house-to-house canvasses. Two years ago in connection with the study of dispensaries the Public Health Committee of the Academy of Medicine likewise had such a canvass made in selected districts of the Greater City. The results of these various studies in this and other American cities, seem to point to the fact that about two per cent of the population is ill all the time, and this illness is of a kind that requires medical attention. On this basis, there are in New York City 120,000 persons sick all the time; not all of them, of course, requiring hospital accommodation. With the 32,000 beds in New York City we can hospitalize one out of every four sick persons.

Distribution of Beds

How well these beds are distributed by services to meet the existing demands is very difficult to answer with any degree of accuracy, except in connection with conditions for which a statistical foundation exists. For example, the demand for tuberculosis bed accommodation can be figured with a fair degree of precision. If the "conquest" of the white plague continues at the rate of the last few

years, we will have to scrap some of our tuberculosis beds along with the navy. To a certain extent, the need for hospitals for children can be gauged. Preventive medicine has focused its attention on the child and with the aid of the pediatricians has reduced not only the death rates but the actual number of children's deaths occurring in this city and it has presumably diminished morbidity. It, furthermore, places the emphasis on educating mothers in the care of their children through the out-patient department. These combined influences have reduced the demand for pediatric beds, in spite of the increase in population. The demand for maternity beds can likewise be approximately estimated. We know the total number of births in the city and if we go on the theory that every primipara should be in the hospital, we have a more or less definite basis for saying that the number of obstetrical beds in the city is insufficient, although the available supply is not fully utilized. For other types of conditions we have to grope more or less in the dark because there are no data on sickness experience by conditions. The waiting lists for various types of accommodation could to a certain extent serve the purpose if they were available and if they were free from repetitions of the same names.

As a possible index we analyzed the experience of the Henry Street settlement which was kindly placed at our disposal. It supplies nursing care to from 30,000 to 40,000 patients annually, and the percentage distribution its cases furnishes a certain guide to the problem; it is limited in value, however, because of the small number of surgical cases which would be included in a group of this kind. In spite of this, the figures form a basis for judging the extent to which hospital cases correspond to the incidence of disease among the general population, but unfortunately very few hospitals publish their medical statistics and those which publish them are not following a uniform procedure and, therefore, make valid comparisons practically impossible.

Full Use of Bed Capacity

There are, however, several additional elements which must be taken into consideration when the adequacy of hospital provisions is judged. One is that the prevailing more or less rigid differentiation of beds into particular services does not make possible the full utilization of the

*Extract from a summary of the report on the hospital situation in New York City, prepared for the Public Health Committee of the New York Academy of Medicine and presented at the annual meeting of the Academy on December 1, 1921.

bed capacity. Some services might be overflowing, while others are slack. Only fragmentary data could be secured to establish the extent of this phenomenon, because the hospitals do not keep statistics by services. Then there is the division of ward services into male and female; finally there is such a thing as seasonal variation in illness. We tried in this last connection to obtain information from the hospitals as to the number of patients and days of treatment by months for the last two or three years, but could get this only from a comparatively small number of institutions. The data, though incomplete, show certain tendencies; there is a slump in December prior to the Christmas holidays, in January the hospital and population usually increases; the same is true of September immediately after the summer months. There is no inverse correlation between the number of patients and the average number of days' stay, as might be expected. In this connection it is of interest to mention that the average stay per patient is smaller in the municipal than in private hospitals.

We must also remember that the sheer existence of beds alone does not connote ability to take care of patients. We should differentiate between the potential and effective hospital facilities. There are many hospitals which run to fifty per cent or sixty per cent of potential capacity, and this taxes them to the limit of their resources because of their insufficient medical, nursing and other personnel.

Out-of-Town Patients

Before considering any additional extension of our total hospital capacity in New York City, it is well to consider very seriously the ways of transmuting our vast potential resources into effective activity. This means larger outlays for maintenance, larger professional staffs and intelligent scrutiny into the way hospital work is being done.

There is another element to be considered in gauging adequacy of hospital provision, the out-of-town population seeking relief in New York hospitals. As this is a rather important matter, we took pains to obtain data on this subject from all of the hospitals of the city, and we offered the clerical services of our staff to go over the record books and ascertain how many of the patients in the medical, surgical, and other services came from out-of-town and what proportion of these were in the wards and in the private pavilion. Here again we could obtain information only from a limited number of institutions, because in many instances the hospitals do not endeavor to ascertain the domicile of the patient beyond a city address. In several instances, we were told that the out-of-town patient, prior to applying to the hospital, acquires some city residence and this address is the one usually given. In some instances the patients conceal the fact of their out-of-town residence. This is especially true of free cases. The segregation of the out-of-town patients by ward and private pavilions applies only to private institutions, as the municipal hospitals, including the contagious disease hospitals, have no private accommodations. Incidentally the hardship to those suffering from a contagious disease and compelled to go to a municipal hospital where no private facilities can be obtained may be mentioned here. On the basis of the available information, we figure that a little over five per cent of our hospital patients are non-residents, and on the basis of the very limited experience of but five hospitals, about thirty per cent of these are private patients and over seventy per cent are ward patients. The hospitals having the largest per cent of out-of-town patients are Broad

Street and St. Vincent's—in both almost one-fourth of their patients come from outside the city. As said above, the total out-of-town population in our hospitals is only about five per cent; it, therefore, does not invalidate the thesis that the existing hospital facilities in New York City are numerically adequate, particularly in view of the fact that the utilization of capacity of almost all hospitals has been falling off within the last ten years. The question, however, may be raised with propriety, whether ward patients, and particularly those who apply for free services, should be accommodated at the cost of either private New York philanthropy or out of our tax proceeds. It is a different matter with the patients who are willing and able to pay for professional and hospital services.

In this connection I should like to introduce the problem of the relation of the private pavilion to the hospital ward. The modern tendency in medical organization of hospitals is toward continuous service and the concomitant limitation of hospital association to one institution, at least insofar as private hospitals go. This tendency limits the opportunities of the visiting physicians to do private hospital work, which is essential to their livelihood, and raises the question of the adequacy of the existing private room accommodations. Our study shows that in the general hospitals of New York City 8.1 per cent of all the beds are private room beds, and 9.2 per cent are semi-private. This is on the basis of all general hospitals including the municipal ones, and it seems to me that this basis alone should be considered when the matter is looked upon from the community point of view, because the same men who are associated with the private hospitals give their time and attention to patients in municipal hospitals. The proportion of private and semi-private beds in the special hospitals is considerably smaller yet, a rather surprising fact.

The proportion of private and semi-private rooms in the general hospitals varies from three-fourths of the bed capacity of some of the smaller institutions to but 15 or less per cent in the case of the largest and best private hospitals. If there be need of extending our hospital facilities in New York City, it is in the private pavilion. The private pavilion, however, should not be regarded as a source of revenue for the support of the hospital. Most hospitals look upon the private pavilion as a milch cow for the institution, and in quite a number of them it helps to roll up a surplus at the end of the year. In many institutions this surplus is very small, but in some it has been substantial for a number of years. One institution showed a surplus last year of almost \$150,000. If the private room facilities were considerably extended and charges reduced to a point at which the private pavilion would be only self-supporting and not an earner for the hospital, the problem of providing hospital facilities for the large middle class would be solved to a considerable extent. It seems to me that not only the proletariat, but also the salariat, as it has been called, deserves social thought. Those cognizant with the situation realize what an important economic problem illness is to the people of moderate means, who, because of their standards of life, would not go to a ward and for whom the prevailing charges are much beyond their financial capacity. Hospitals which make considerable profit on the operation of the private pavilion ought, in fairness to the public, make it known that the rates charged include not only all the costs of operation of the service, interest on capital invested, depreciation on the building and other incidentals, but also profit applied toward the maintenance of free ward patients. The philanthropy of these hospitals should be qualified to that extent.

VITAL STATISTICS THAT HOSPITALS SHOULD COLLECT AND PUBLISH*

By NATHANIEL W. FAXON, M.D., ASSISTANT RESIDENT PHYSICIAN, MASSACHUSETTS GENERAL HOSPITAL, BOSTON

VITAL statistics is that portion of demography that applies the statistical method to the study of vital facts, such as birth, marriage, sickness and death. The statistical data of hospitals form that portion of general sickness and mortality statistics that we are interested in considering, and includes not only the vital facts relating to sickness and death but also other facts concerning patients in hospitals.

Hospital statistics fall naturally into three groups:

1. Statistics dealing with the admission and discharge of patients, age, sex, race, occupation, and similar facts; patient's days treatment, average days of treatment per patient, number of empty beds, and other data indispensable to the administration of the hospital.
2. Statistics dealing with the medical or surgical history of the patient, including diagnosis, operation, pathological findings and autopsy, and the facts concerning morbidity and mortality.
3. Financial statistics, which include a detailed account of the receipts and expenses of the various departments, the cost per patient per day, cost of food per capita, and other costs by which the efficiency of management may be determined.

Vital statistics relate only to the first two groups.

The preparation and study of hospital statistics has in the past shown the efficiency of methods of treatment, such as serum therapy and of operation in surgical conditions. It has also shown the seasonal prevalence of certain diseases and the increase or decrease of a given disease during a period of years.

Hospital Statistics Act as Controls

Hospital statistics serve to act as controls to crude vital statistics through their exact laboratory methods and autopsies. There is also great opportunity to add to vital statistics, through the study of the incidence of non-fatal disease. Both of these groups are of aid to public health administration.

Statistical study of hospital data is indispensable in establishing administrative programs for an institution.

The fields of service of hospital statistics are therefore:

1. The advancement of medical and surgical science.
2. The aiding of public health administration.
3. The assistance of hospital management.

To serve a useful purpose in these several fields hospital statistics and hospital reports must fulfill three distinct purposes or conditions:

1. They must be statistical or scientific and complete.
2. They must be arranged for development or interpretation.
3. There must be some measure of efficiency of service.

It is obvious that all hospitals cannot collect and arrange all their statistics in a similar manner. A hospital treating only tuberculous patients can find few lines of comparison with a general hospital, and a state infirmary treating only free patients may find its tables widely at variance with a hospital treating mainly pay

patients. Even in extreme cases, however, certain common grounds for comparison may be found as in the statistics concerning individuals with a common disease and similarity of tables may be had by the use of a common nomenclature of disease. But for a general comparison hospitals must be grouped according to their size and the class of patients that they treat, into:

1. General hospitals treating both pay and free patients and affiliated with some medical school and designated usually as teaching hospitals.
2. Non-teaching hospitals.
3. Special hospitals as mental and psychopathic, tuberculous, and eye and ear.

A distinction must also be made between house or non-ambulatory cases and out-patient or ambulatory cases. In this paper consideration is made only of house cases in general teaching hospitals of about 500 beds, although the general principles laid down will be applicable to other hospitals and to out-patient departments.

Complete Tables for Conclusions

A general hospital then, should collect complete statistical data on each case, arrange these data so as to be readily accessible for use, and study them to determine the efficiency of treatment and management.

"Invaluable logical conclusions may be drawn from complete statistical tables but the conclusions drawn from incomplete tables are always fallacious."¹ The truth of this assertion is shown by the comparative death rates at the Johns Hopkins Hospital 1902-1911.² Two factors only are considered, mortality and color.

Total death rate.....	5.8
Death rate, white males.....	5.1
Death rate, colored males.....	12.6

From this table it can easily be seen that if only the total death rate was considered, an entirely erroneous conclusion might be drawn in regard to the death rate for colored males, which was over twice as much. This clearly shows the need of complete tables covering all factors.

One of the common defects of histories is that they leave many important questions unanswered. One of the remedies is a series of blank forms with spaces for the recording of answers to definite questions. Another method is the use of an outline for the history taker to follow so that he may not overlook important points without being obliged to conform to a stipulated form. In both cases portions of the history are to be written with entire freedom from such rigid devices. The blank form is from the statistician's viewpoint more desirable, while the other appeals more to the clinician. In either case the data collected should bear the signature of the person responsible for them.

However obtained, a complete case history should contain the following information. Some of it concerns vital statistics, some is of use only to the hospital administration. All is necessary.

1. Serial number.

1. A. S. Percival, M.A., How to Read Statistics, British Med. Journal 1919, p. 540.
2. F. L. Hoffman, LL.D., The Statistical Experience Data of the Johns Hopkins Hospital, Baltimore 1892-1911.

*Read at the annual conference of the American Hospital Association, at West Baden, Ind., Sept. 12-16, 1921.

2. Date of admission.
3. Service and ward to which admitted.
4. Name.
5. Residence, to determine the geographical area served by the hospital.
6. Sex.
7. Age.
8. Color.
9. Nationality, as determined by mother tongue.
10. Social status: single, married, widowed, divorced, separated.
11. Industry, as shoe factory, and occupation, as laster. Employers' name in some cases.
12. Whether or not a re-entry.
13. Body weight and stature.
14. Duration of stay in hospital.
15. Condition on admission: Acute, chronic, accident, for diagnosis, normal (pregnancy).
16. How discharged: Untreated, against advice, dead, otherwise discharged.
17. Medical history, including family and past history, present illness and physical examination, admission diagnosis, preliminary or pre-operative diagnosis with complications, surgical operation with description by the operator, anesthesia, report, treatment and bedside notes at least twice a week, laboratory findings, pathological reports, autopsy report if performed, and special data on special diseases. Social case histories are becoming increasingly useful and will doubtless in time become a part of each individual's history. At least social service number should be entered.
18. Birthplace.
19. Birthplace of father and mother.
20. For purposes of notification, names and addresses of two relatives or friends.
21. Name and address of patient's physician.
22. Whether pay, part pay, or free, and rate charged.
23. Number in family and weekly wage.

For good and sufficient reasons, hospitals may add or subtract from this list, but for routine purposes this list may serve as a basis.

Experience has determined certain methods of assembling these data in record rooms.

1. Name catalogue, giving the data collected on the admission slip, together with the discharge data, and the proper reference for finding the record in the files.
2. Diagnosis catalogue of individual cases.
3. A compilation of statistics, kept on cards and arranged by years and subdivided to show sex, whether medical or surgical and division of each, and mortality.
4. Operation catalogue, filed under diagnosis and showing the operations performed.

Experience has also shown that such catalogues but imperfectly supply information. They readily answer what may be characterized as the obvious, but are able to assist but slightly in the study of the unknown. The solution is the use of perforated cards and mechanical tabulation. Professor Raymond Pearl of Johns Hopkins Hospital says "the first duty of a hospital statistical department should be the transferring of the basic routine facts from all case histories to punched cards for the purpose of indexing, assembling and tabulating."

The most generally useful and flexible systems of me-

chanical tabulation are those known as the Hollerith system, from its inventor, Herman Hollerith, and a modification of this made by the Powers Accounting Company. By their use a large number of data are easily transferred to small punched cards and almost any conceivable grouping of data obtained through mechanical sorting and recording machines.

Sorting the Cases

For instance, if it is desired to determine the number of cases of appendicitis in Italian children under ten years of age, we have only to set the sorting machine, first for appendicitis and by running all the cards for the year through to get all the cases of appendicitis. A second setting for race and run will produce all the cases of Italians. A third setting for age and run will give the number of Italian children under ten years and from these cards we can obtain and study further the case histories. All sorting is done at the rate of 250 cards per minute, so that the whole procedure occupies but a mere fraction of the time that would be consumed in sorting similar data from a card catalogue, if indeed it could be sorted at all.

No card catalogue can foresee the questions of investigators, no hospital can afford the labor and expense of hand tabulation of these unexpected questions. Mechanical tabulation is the nearest means of providing for this yet devised. It is in successful operation at the Massachusetts General Hospital Industrial Clinic and at the Johns Hopkins Hospital. I do not advocate the abandoning of the card catalogues that have grown up as the result of years of experience; I do advocate the addition of this system to our present methods. Simplification will follow in the natural course of events. That which is unnecessary will be discarded.

One of the immediate results of the use of this system would be the easy calculation of age group morbidity in hospital patients, a grouping advocated by statisticians, but opposed by hospitals because of expense and difficulty.

The data to be recorded on these cards will of course vary according to the ideas of the staff of the hospital compiling it, but in a general way and let us hope for the common good of hospital statistics, it should tabulate most of the data already set down as constituting the statistics that a hospital should collect. The Industrial Clinic at the M. G. H. has developed a card suitable to its peculiar needs and Professor Pearl has suggested one that is in use at the Johns Hopkins Hospital.

One of the important points in order that comparison may be made is the adoption by all hospitals of a common nomenclature of disease. Most hospitals now follow the International Classification; many have developed modifications of this classification which increase its value for use in cataloguing. Two of the most widely known are Bellevue Classification and the Classification adopted by the Boston Hospitals. This latter divides diseases into 41 sections according to well recognized groupings such as specific infectious diseases, diseases caused by animal parasites, special skin diseases, diseases of the circulatory system, etc., and under each group follows an alphabetical subdivision. Two numbers are given, the number of the section and the international classification number. For cataloguing purposes this gives sufficient accuracy and ease of manipulation. But for use on a tabulation system further subdivision is necessary. For instance, all skin diseases are listed as 10-145, making it impossible to select the cases of psoriasis unless a sub-code with distinctive number is used. The United States census bureau code attempts this, but is rather cumbersome.

1. "Modern Methods in Handling Hospital Statistics," Raymond Pearl, Statistician to the Johns Hopkins Hospital.

The imposing of any one hospital diagnosis code upon the other hospitals of the country is undesirable unless such code is voluntarily adopted because of excellence. Probably the ideal code will develop in the course of practice and be adopted through its merit; perhaps some committee may be appointed to study this situation and hasten the compiling of such a code. Until then the International code should be used as a basis in reporting statistics.

Unit System of Filing Histories

"The purpose of filing case histories is two-fold: first, to preserve them, and, second, to do it in such a way as to make them most readily accessible to anyone who may in the future want to consult them. There can be no question that the latter purpose will be best served by the so-called 'unit system' of case histories, in which the hospital's complete record about any one individual forms one separate and distinct volume."

We have now considered the first two methods by which hospital statistics may serve a useful purpose in their several fields, namely, the primary data they should collect and the method of arranging it. There must still be some measure of efficiency.

A hospital may measure its efficiency in two ways: First, by comparison of its own results from year to year; and, second, by comparison with the results of other hospitals similarly situated and caring for similar classes of patients. To compare the results of hospitals having dissimilar factors must lead to misinterpretation.

Dr. E. A. Codman has stated in a very clear and concise manner the logical questions which any individual might ask, to determine the results of medical and surgical treatment.

What was the matter?

Did they find it out beforehand? That is, before operation?

Did the patient get entirely well? And stay well?

If not, why not?

Was it the fault of the physician or surgeon, the disease, or the patient?

What can be done to prevent similar failures in the future?

What was the matter and did they find it out beforehand are naturally answered by comparing the preliminary and final diagnoses. These data appear on all the case histories at the Massachusetts General Hospital, but have never been tabulated. A slight step was made in this direction, by the compilation and publication of the studies of surgical facilities, but no general table of such a comparison has ever been made. That such a table would be instructive is self-evident.

Did the patient get entirely well? We have come to realize in Boston, largely through Dr. Codman's teaching, that results must be extended to include the end result of the case, which is really the vital result from the standpoint of the patient. That the patient survived an operation or recovered through some medical treatment sufficiently to leave the hospital is of course worth knowing and recording, but it is of far more vital interest to know the condition of that patient one year, two years or even five or more years afterwards. Consequently additional data must be obtained and added to the case history, through a follow-up system.

At present at the Massachusetts General Hospital on all surgical cases, (expense has prevented the extension to include all cases), a letter is sent one year from the date of discharge, requesting that the patient report at

the hospital for examination and advice, or if unable to do so that he write or have his physician write describing his condition since leaving the hospital. This examination or reply is entered on the patient's record. If no reply is received, another letter is sent to the physician who recommended the patient to the hospital. Further efforts are directed through postmasters, and by the aid of directories. The percentage of successful follow-up cases during the last year has been 52 per cent. In some groups of cases, through the interest of staff members, patients have been followed up to ten years and the results noted on their records. The results of this follow-up work have been published only by individual investigators for certain small groups of cases, but never as a part of hospital statistics, to which they truly belong. Thus only may a hospital truly estimate its medical and surgical efficiency.

Was it the fault of the physician or surgeon? If errors can be shown, staff as well as patients benefit, and incompetency is discovered. Honesty is the best policy for hospitals as well as for individuals.

Was it the fault of the disease? Certain diseases are recognized as at present incurable and in considering end results such diseases should be grouped and due allowance made.

Was it the fault of the patient? If a patient refuses the advice of his physician then he must accept the results, be they good or bad.

It is necessary, therefore, in order to measure the efficiency of a hospital, to add to the accepted routine data the findings of the follow-up system and to compile and study end results. Both card catalogue and tabulation systems are available for this.

Cooperation Necessary for Collection

The medical staff of a hospital is or should be interested in its vital statistics and the form and accuracy of the medical case histories rests almost entirely in its hands. The collection of a large part of the other vital statistics and the development of all statistics rests largely with the administrative department.

The publication of these data concerns the governing and administrative bodies. Successful collection and intelligent publication can be obtained only by a common interest and cooperation.

Consideration of the comparison of the results of one hospital with the results of others leads immediately to the study of the statistics that hospitals should publish.

The publication of hospital statistics brings us to the consideration of annual reports and other publications wherein hospitals present their statistics. The same field of service exists here and the same tests may be applied as were applied to the collection of statistics. Such publications should increase medical and surgical knowledge, aid public health administration and, through comparison, assist in hospital management. The statistics should be complete, arranged for interpretation, and have some measure of efficiency of service.

Experience and custom has in the case of some of the general hospitals developed a somewhat similar publication of statistics. This similarity is mainly superficial and comparison is only made after laborious rearrangement and adjustments. Statistics relating to vital facts only are to be considered.

Hospitals usually publish, generally in an annual report, some or all of the following tables:

1. A comparative statement showing the number of patients admitted, treated, and discharged, the condition at discharge or how discharged, average pa-

tients per day, (it should also state the average number of empty beds) the division of patients treated into pay, part pay and free, and the total days of treatment. This gives a general indication of the amount of work done by the hospital.

2. A table of residences of patients, which shows the geographical area served by the hospital.
3. A table of the birthplace of patient and patient's mother, intended to show the nationality of the patient, but which in our polyglot population fails lamentably.
4. In some cases a table of occupations, which is of course of slight interest to the student of occupational disease and of none to others and for this reason is often omitted.
5. A table of medical and surgical diseases in terms of the International Classification divided according to disease, sex, and discharge. The degree of completeness of this table varies widely.
6. A table of surgical operations. The method of compilation of this table varies greatly. It is often omitted.
7. Some hospitals have published a table showing the surgical fatalities with a critical discussion of each case, which is in a sense the first step toward the study of end results, but unnecessarily lengthy.

Common Basis for Collection

The number and arrangement of these tables varies in all reports. I have seen but three hospitals publishing reports containing similar tables, similarly arranged, and these only for three years. The similarity has now ceased. A large amount of local option would seem desirable, and hospitals should in a general way be allowed and encouraged to publish those statistics that best fulfill the demands of those interested. But for the promotion of medical and surgical knowledge, for the assistance of public health and as an aid to hospital management, the main fields of service for hospital statistics, it is desirable that certain tables be collected on a common basis, with a common nomenclature and form, and be published by all hospitals. To state dogmatically all the tables that should be published would develop a discussion and probably considerable difference of opinion. Certain tables might, however, seem so universally useful as to admit of acceptance by all.

1. The table showing the number of patients admitted, treated, and discharged with various other data is found in all large hospital reports that I have examined, but there is no uniformity in the arrangement of these facts. In its present form this material cannot be compared. Since such data is universally accepted as desirable, should it not be presented in a similar manner and by a common accepted form?
2. The table of medical and surgical diseases is the next most commonly published table and through the adoption of the International Classification or some modification is in most cases comparable for totals, but here again the similarity stops. Some hospitals further classify into medical and surgical, some by sex, some by admission, others by discharge. Again the need of a common form of report is shown in order that this mass of data may be utilized without prohibitive effort.

The need of cooperation on these lines produced in Boston the organization of a committee of the record librarians of the five largest hospitals to assist in hospital standardization by using similar methods in caring for

clinical records. The results of this organization have been an improvement in the classification of disease, the attainment of a closer cooperation with the hospital staff, the bringing about of a more nearly similar annual report, the extension of membership to ten other hospitals, and a keener study of the whole problem of collecting and publishing statistics.

The National Tuberculosis Association has for the past three years been studying and perfecting a standard nomenclature and standard follow-up system which will be reported for adoption by all members of the association this year.

The need of common standards is clear; the appreciation of this need is shown by these two widely separated considerations of the subject. The exact method by which we may attain this standardization is, however, not so clear. Two methods present:—

Consideration of National Committee

The first, following the lead of the National Tuberculosis Association, by the appointment of a committee representative of the whole country, to consider, compile and recommend, standard tables suited to the several groups of hospitals. Such a committee should consider what data could be collected in common by all hospitals, what arrangement should be made, and what should be published. All data collected should not be published. Statistics for statistics' sake are useless. Some useful purpose must be served before hospitals will finance the publication of statistics. Consideration of the various groups of hospitals should lead to the selection of a different standard of publication. Some data should be common to all and published by even the smallest hospitals. Larger hospitals should publish more complete tables and special hospitals their own special data, but all upon a common basis. What this data should be and what tables should be published should form the work for such a committee. The recommendations of the committee should then be referred to the hospitals through their executives for consultation with their staffs. As has been pointed out, hospital statistics concern both staff and administration. It is a subject needing the sympathetic and careful study of both the physician and superintendent. Neither group should seek to impose its ideas upon the other without consultation.

Consideration of District Committees

The second method would be the consideration of the same subject by geographical units, committees representing such units while covering the same ground and confronted by the same problems, might be influenced and guided by local conditions so as to produce a plan that would meet with more sympathetic reception. Since both staff and executives are represented to a large extent in the state medical societies of the American Medical Association, the subject of statistics and their publication might well be submitted to these societies for their consideration. Conversant with local conditions, dealing with a smaller and less complex situation, they might work out a system that would be more likely to be adopted by the hospitals of their area, than a more ambitious and comprehensive plan which ignores these local conditions. If such local systems should meet with adoption, comparison of the success of various plans could be made and larger grouping result through the adoption of the better plans and perhaps finally a common system adopted throughout the country.

Of these two plans, I am inclined toward the support of the first, as more likely to produce results.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Department of Nursing Education, College for Women,
Western Reserve University, Cleveland, Ohio

THE RELATION OF A SCHOOL OF NURSING TO A HOSPITAL

By ISABEL W. LOWMAN, CLEVELAND, OHIO

MISS NUTTING has said that the relationship existing between training schools and the hospitals in which they have arisen is a most unusual form of relationship, and that nothing at all like it exists in connection with any other school of the present day—that through this relationship the training school for nurses becomes an institution established by the hospital with one large, main purpose, and what we might call one subsidiary purpose in mind. "The first purpose," she says, "is clear-cut and imperative. The nursing work of the hospital—its most important task, must be done; the training school, through its students, will do it. The primary function of all training schools is that of carrying on the regular nursing work of the hospital. The education of the nurse is the subsidiary, secondary purpose of the hospital in establishing a training school, and it follows, as a matter of course, that it can be carried out only in so far as it is compatible with the main purpose of nursing the patients through the school."

There we have the matter in a nutshell, and it remains for us to discover how this condition has arisen, and why, in spite of the attention and interest which the American public has ever bestowed in matters relating to education, so extraordinary an exception should exist in our midst. Why should so large a number of hospital schools of nursing remain practically untouched by the influences which mould and shape the character of all other technical and academic institutions, and assure them a steady, progressive development along the lines of our best pedagogical thought? Why are schools of nursing a thing apart from the standards of the world about them, eligible neither to public criticism nor direct public support? How is it that any system of education, no matter what its pretensions, can so cloister and immure itself as to lose that most precious of all benefits, the understanding, cooperation and support of the intelligent men and

A PLEA TO NURSES

"I implore you to look over and beyond all selfish aims and considerations; accept the care of the sick as your sacred obligation, and because of them and in their interest, press your claims for better schools not only with the unorganized public but with your state and national legislators. In a country where our founders proclaimed that our laws should make possible an equal chance for the pursuit of life, health and happiness, the obligation to see this pledge more fully filled rests in large part with your profession. You cannot have great nurses in these days without good schools and you must be insistent, in season and out of season, until you have made your claim clear to everyone—including those of your own number who do not make enough use of their collective strength and of their combined action."

women whose constant interest in matters pertaining to education is one of the greatest sources of American pride? Alone of all schools, your schools of nursing receive no gifts, no endowments, no material recognition from society, which supports the hospitals where these schools are sequestered. Alone of all students, your claim for libraries, laboratories, classrooms, and instructors is a claim hardly tolerated, rather than met in a spirit of intelligence and justice. Alone of all students, you more than pay for all that you receive in the

way of housing and table, plus educational opportunities, which you rarely receive in anything like just measure.

Practically all other forms of education in this country, whether supported by private funds or by public subsidy, give the greater part of the student's education without individual charge to that student, so much so that it is said that the tuition fees paid by young women in our best women's colleges amount to only about a third of the expense of the education which they receive in these institutions. The same thing may be said of our great government service schools, Annapolis and West Point, where our midshipmen and cadets receive not only a splendid education, but an adequate money allowance from the United States Government during their stay there. There is, of course, a difference here, because in their case there is an unwritten obligation on their part to serve the country along military and naval lines after graduation. However, I think we can justly say that student nurses pay for far more than they receive while they are at school and that unless nurses break through the wall which separates their schools from a seeing and understanding public, they will, in the public estimation, at least, be rated as graduates of apprenticeship schools where workers are prepared to exercise a trade rather than a profession. Either you will climb up and out of your separateness and apartness from all other American

institutions of instruction and learning, and insist upon the general adoption in your own schools of a minimum pedagogical requirement which will establish your interconnection with other schools, or you will continue to suffer the inequalities and mischances of an institution whose processes are hidden out of sight and are, therefore, untouched by the improved standards of the world without.

It is only fair at this point to say a word about the notable exceptions which have been made during the last few years in the affiliation of some seventeen schools of nursing with universities. As matters now stand, the generality of your schools constitute an anachronism in our midst, and in many instances, are almost anarchically at variance with the traditions of the educational system of our country. By accepting candidates in any of your schools who have not completed their four years of high school, you are encouraging, tacitly at least, disloyalty to the school system of our country, both public and parochial, and, at the same time are making yourselves ineligible automatically to a proper representation under our state universities. Your isolation exposes you to loss on every side. Therefore, we now have the anomaly of a federal and state government yearly making laws whose execution depends upon the cooperation of thousands of women in whose education public subsidy yet plays no conscious part. One of the great public utilities—for such nursing has come to be—has no generally recognized place under our state universities such as that given to other branches of education.

Hospital Movement Has Uneven Expansion

The expansion of the hospital movement in this country has been on a par with the expansion of all other forms of human enterprise. It has been subject to an unevenness in development which has had a very sensitive register in the treatment of student nurses. The same defect of relationship of the training school to the hospital whose dangers to the student in one community may be offset by the liberal understanding and attitude of some member or members on the hospital board of administration, may in other communities render it possible for a hospital to take three years of hard work from a young woman and give her nothing in return except her living expenses and the opportunity to do this work. Until you succeed in remedying in some generally recognized and fundamental way the defect inherent in this relationship, you will make such slow progress that a rapidly moving world about you may supplant your whole system by something which, superficially speaking, may seem more in consonance with its needs. Nevertheless, one who studies your affairs from the outside comes to the conclusion that the bias and tradition of the nursing profession is the result of so many centuries of self-abnegation and acquiescence that it will be exceedingly difficult to get anything like a full recognition of your needs from the hospitals for some time to come. The relationship between hospital and school is somewhat like the old-fashioned relationship—and not so old-fashioned at that—between man and wife, where no well-defined economic rights accrue to the woman, even when she is a working partner in the efforts which found a fortune.

In a way, you yourselves as a group are the originators of this scheme of things for, in the beginning, centuries ago, you nurses and your sick *were* the hospital. It was you who called in both priest and physician. In those days you were doing your own work and it mattered little to you whether you baked or scrubbed or gave bedside care, provided you increased your capacity for taking care of a constantly growing number of the sick and

suffering. Your ideas in those days were centered upon works of religion and mercy which aimed at nothing further in the care of the sick body than the kind of skill which practice gave you and which the compassion which lies at the source of all true religion no doubt made deft and tender.

But in those days when your minds were exclusively fixed upon a kingdom not made with hands, upon a beatific land toward which your weary feet were tending in search of eternal rest and a reward for your labors, it is not strange that you should have exploited yourselves extraordinarily, that long days and long nights should have been your self-imposed burden and that you should have counted no labor and no bodily hardship too difficult in the interest of mankind and your own personal salvation. Other communal societies, impelled by different motives, have acted along similar lines in our more modern days. Toward the middle of the last century a very distinguished group of poets, idealists and philosophers met in our New England States to associate themselves in an enterprise called The Brook Farm Experiment. No labor was to be called by them common or unclean. They felt that much of the unhappiness of modern society comes from sharply defined differences of occupation of its members. Therefore, when they founded their association, Emerson, I believe, followed the plow when he was not teaching philosophy, and the mother of a very dear and well-known friend of mine did the ironing and taught Greek.

You, however, had as nursing orders, I imagine, no conscious purpose of this kind when you varied your labors according to the needs of your institutions. Your idea was to increase the size of your institution so that you might have more patients. And, therefore, you yourselves, are perhaps the unconscious authors of your own present predicament, and it is small wonder that in a few decades you have not succeeded in relieving your schools of the pressure from these institutions for their practical, immediate needs for expansion.

Now, how and when did the idea arise concerning these early nursing groups other than those which originally animated them? Historically, we all of us know the different steps which have gradually led up to our day. But we have a way of associating our history with the bookcase and our practice with the immediate pressure that each day puts upon us. We fail, therefore, often, to interpret one in the light of the other, and consequently lose valuable aid.

When you were nursing orders, when you were doing your own work and were expanding materially and were increasing your temporal possessions in order to be able to do more good for your religion and your fellow-man, you were, at the same time, maintaining an institution which helped to make possible the advances of medicine. At least it brought the sick together in large numbers and made it possible for medical men to observe and care for them. And if this is so, must we not believe that in a fine and gradual sense it influenced the development of nursing and gave it, no matter how faintly, its orientation toward medicine? This, of course, may have been too slight a trend to be noticeable and certainly it was not sufficient to awaken an awareness of the fact or even a consciousness in a group of women whose whole lives were devoted to self-suppression and to salvation through self-sacrifice and renunciation; but who can tell how long a tiny seed may lie dormant and yet grow and bloom and propagate itself with rich harvests in far distant time? The tiny seeds, buried for thousands of years in the tombs of the Pyramids of Egypt, are said to re-

spond to the quickening influences of soil and light. So here, if we may find our reasoning true, we have the nursing orders establishing on one hand a bias of self-exploitation and self-sacrifice, and on the other hand, building up a tradition of service, faithfulness and obligation to alleviate the sufferings of mankind which finds nothing finer for many long centuries to rival its efforts. We also see that they were principals in this movement of mercy and religion and that the institutions which their hard labor maintained helped to foster and cherish medicine and to prepare for nurses of a later day their part and lot in this science.

We also know that among these nurses were women of great ideals, of noble birth and traditions, and that lofty impulses animated and sustained them, even though they had, as yet, caught no glimpse of the eternal nature of those sciences which foster and preserve mankind in its mortal continuance and carry it forward to constantly ascending levels.

With the Reformation, many of the noble and beautiful things that man had acquired by long and painful toil were flung aside and during the first period of secular nursing in Protestant countries, we find a condition of vulgarity and loathsomeness accompanying the care of the sick in institutions which even yet casts an onus upon the name of nurse. The care of the suffering was turned over to rough and untrained hirelings and the medical profession, which was progressing constantly along purely scientific lines, unmodified by the social needs of the sick, accepted these rough caretakers and apparently had no thought of helping to improve their abjectly inferior and degraded status, either for the sake of the worker or the patient whom she tended. Just as during the Reformation the beautiful music, the carvings and paintings were cast out of the reformed churches, so in the first transition from monastic to secular nursing, the sisters who exemplified the dignity of religion, of self-consecration, and of willing service, were replaced by hard, coarse women whose need for bread made them seek it in a service which, shorn of its religious meaning and unredeemed by any thought of art or methodic progress in its performance, was most naturally considered a menial occupation.

This state of things was bound to yield to the great spirit of social reform which stirred like a breath of life through England in the middle of the last century, and which was a legitimate reaction to the terrible wrong put upon the laboring people by the frantic industrialism impetus in the events of the Crimean War, when the miseries of the British soldier because of lack of nursing care, were made apparent to the people in their home land. It was at this period that Florence Nightingale became the interpreter of the finer and nobler instinct which lay unused in the natures of her countrymen, and who, through the agency of that war, was able to break through the prejudice and apathy of public feeling which condemned English gentlewomen to a sphere of activity entirely within the individual home. Once again nursing awoke in response to the call of a great need in a great hour, and enriched itself with the fine and beautiful things which religion, compassion and self-sacrifice have ever as their gift. I think we may fairly say, also, that one of the earliest influences in the emancipation of women was the interest involved in the higher development of secular nursing. The knell of the "hireling" had sounded. Nursing as an occupation for gainful purposes only, was at an end. Once more its feet were set on the century-old path of service to mankind.

But Florence Nightingale had perceived that nobility

of purpose, aptitude for the practice of nursing, and a love of mankind were not enough to secure nursing from another period of decadence and perhaps total eclipse. Her clear vision saw nursing as one of the fine arts depending for its improvement and continuance upon a body of well-defined principles which should relate it to medicine so that the incalculable benefits of that science might be available to man in new and countless ways. She saw the nurse as the foster-mother of mankind. Most happily, the gift of two hundred thousand dollars, given to her by a grateful country because of her service in the Crimean War, made it possible for her to found a school of nursing whose *primary* object was the education and training of the nurse. Although the first nurses trained in this school were given instruction necessarily far inferior to that given in the majority of our hospital schools of today, they were, at entrance, a decidedly hand-picked group and many of them were women already possessing a considerable degree of education and culture. These pioneers and founders went forth somewhat as the apostles did in an earlier time, filled with zeal and fervor and counting no labor or sacrifice too great to increase and further the cause of nursing by founding other schools. The record of these women is a very bright page in nursing. The thing that is incomprehensible to me is that when the idea of the training school was transplanted to this country, we took the ideal without providing the practical means for its development. We made little or nothing of the fact that definite, assured means of material support must underlie all efforts to provide education. In our eagerness to spread and propagate this wonderful system we went ahead too fast and became confused in our reasoning.

In England no great use is made of nursing as a luxury for the well-to-do classes in their own homes, so that there could not be so great a demand for the production of the so-called private duty nurse, and consequently not so great a stimulation for the rapid production of women able to render this type of service. From the first they seem to have been concerned with the production of nurses who could either serve the sick in hospitals, accomplishing at the same time the reform of these institutions, or could develop a visiting service to the poor. In our own country, everything spreads as fast as a prairie fire and within a very short time after the training school idea had reached the United States, our hospitals had discovered the essential utility of a training school in the carrying out of their own purposes. Because of all these things and of many more which no doubt could be deduced from a careful study of the social and economic tendencies of the last fifty years, training schools for nurses in this country have become so inextricably confused with the practical and immediate needs of the sick within the hospital walls that the public knows much of the hospital and but little or nothing of the processes which yield one of the hospital's finest fruits—the nurse.

Nurses' Position Has Changed

At the same time, nurses have lost the recognized importance of their original position in the development of hospitals. Secular nurses are not associated with the hospital as owners or as prime movers in their tendencies and purposes. As pupils they make an important contribution to the support of these institutions through a great deal of voluntary service, just as physicians make an important contribution through service as well as their medical research. But, whereas this service on the part of the physician is generally known and recognized by the public, who, because of its interest constantly gives large

sums of money for the endowment of medical schools, the services of nurses in connection with hospitals are not so recognized, and the public feels, if it thinks at all about it, that the student nurse receives as much as she gives when she receives a diploma at graduation, and it does not question the validity of that diploma or the conditions under which she has received it. Did the public but know that student nurses annually contribute many millions of dollars to the maintenance of hospitals over and above the cost of their own maintenance, and the insufficient education provided for them by these hospitals, it would surely deal more fairly with them.

But what I should like more than any one thing to express myself about is the attitude of nurses toward the hospitals and toward the public. I feel that until they have secured the active cooperation and financial help of the public, they must consent to help support our great hospital system by continuing to give more than they actually receive as students; that they must consciously cooperate with it in a way to make the continuance and growth of these institutions possible; that they must once again call upon their treasures of self-sacrifice and devotion in the interests of a common cause—the cause of better service to mankind. Their relationship to the hospital cannot, as yet, be adjusted on a basis of strict justice—not until public opinion is willing to underwrite such a readjustment by the gift of funds for this special purpose. Once again a great revival must overwhelm and bear nursing on to new goals. If, in these days of world financial depression and strain, our hospitals are, in any great measure suddenly deprived of the work of their student nurses, even to the extent of giving these student nurses full return for the work which they perform, there is no doubt but that many of them would either close their doors, or would revert to the sterile practice of operating their institutions with permanent attendants who would, in a sense, resemble those who were employed before the reform of secular nursing through the training school.

The student nurses and the medical interns who pass in never-ending line through the hospitals and who, going forth, minister to the multitude beyond the walls, constitute in a certain sense the productive, the fertile side of the hospital endeavor; the side which relates it to the community and to the state. But what seems of first consequence to me is that you should not only be conscious of your contribution to these institutions, but that you should give it in a spirit worthy of your great traditions. The vocational side of your profession is the precious growth of long centuries, relating you to the care of mankind in so essential a way that that you cannot escape its implications. And the nurse who seeks primarily her own selfish advantage in any sense, is as repugnant to one's instinct as the clergyman or physician who makes of his calling primarily a personal matter.

More Nurses Must Be Trained

On the hospital schools, as matters now stand, largely depends the production of more nurses, and more nurses there will have to be to satisfy the growing demand for the education and the care of hundreds of thousands of our population whose needs are constantly more apparent to us because of the progress and findings of sociology and medicine. The application of the benefits of these sciences to mankind can so largely rest with you if you will accept the obligation. Not only the public health nurse but all nurses should have an opportunity during their undergraduate years to receive that grounding in these two subjects which will teach them the interde-

pendence of human life whether in health or in sickness.

I do not know whether or not I have made my meaning clear. Personally I feel that a nurse must have the broadest and best kind of an education, as well as technical skill, in order to do the work which modern civilization asks of her. But I also feel that in some way she must consciously help support the hospital as part of her duty to those beyond its walls; that she must reënter the hospital complex as one of its prime movers, and promoters; that she must reorganize her relationship and claim a part in the productive enterprises of the institution. It should be her hospital, as well as her training school; her sick as well as her ward instruction.

The efforts which the members of your League of Nursing Education corporately, as well as individually, have made, and are ceaselessly making to improve the character of nursing schools in general and to relate them to the educational institutions and standards of the modern world are undoubtedly bearing fruit on every side. This effort, together with their unwearied persistence in urging upon our state legislatures the necessity of protecting a standard of nursing through state registration is worthy of the best traditions of those who have fought and conquered in any of the professions.

But the task of reforming the hospital school system in a country so large as ours, and offering such a variety in the character of administration, both politically and financially, makes the enterprise exceedingly delicate, as well as difficult, and might well discourage a group of women less devoted or with a less clear-cut object in view. It is precisely because the League of Nursing Education is made up of women intimately associated with the practical difficulties of hospitals that one feels sure that they will in time work out a plan which will reconcile all seemingly conflicting needs in the interests of the nursing care of the sick.

Nursing Link Between Public and Schools

The principal of a school of nursing will take into full consideration the fact that a student nurse has need to become skilled in the performance of her work as well as merely to acquire a knowledge of its technique; and she will, therefore, be very liberal in her interpretation of the value of much repetition of service which to a theorist might seem a waste of time as far as the student is concerned. She also sees the ward not merely as a shop or laboratory, but also as a unit, a microcosm of that great outside world where the alleviation of sorrow and suffering is the legitimate concern of the student who graduates from these classes. The weakest point in the League of Nursing Education defenses today is the lack of leisure and the lack of money with which to conduct a vigorous campaign which would reach a general public instead of the intensive audiences of the League's own professional world.

This is one reason why it seems to me that perhaps no single effort at this present juncture would be as valuable as massing the combined national nursing strength in an endeavor to carry the plea of the Johns Hopkins School of Nursing for a million dollars over the top. It would advertise the missing link—that of the direct tie between the schools and the giving public more than any other. It would bring tremendous returns for the energy expended.

The responsibility for the improvement of hospital schools of nursing must, of course, rest upon your League of Nursing Education, your alumnae societies, and district organizations. But I implore you to look over and beyond all selfish aims and considerations; accept the care

of the sick as your sacred obligation and, because of them and in their interest, press your claims for better schools not only with the unorganized public but with your state and national legislators. In a country where our founders proclaimed that our laws should make possible an equal chance for the pursuit of life, health and happiness, the obligation to see this pledge more fully filled rests in large part with your profession. You cannot have great nurses in these days without good schools and you must be insistent in season and out of season until you have made your claim clear to everyone—including those of your own number who do not make enough use of their collective strength and combined action.

BY WAY OF CONTRAST*

By LINDA RICHARDS, Foxbury, Mass.

The publication of commencement addresses is usually limited to the reports of the schools concerned, but the following address by Miss Linda Richards, who is characterized as "America's first trained nurse," deserves to reach a wider audience. Hence we value the privilege of serving as a medium for its publication.

In connection with this paper it is interesting to refer to one History of Nursing (Nutting and Dock, Vol II, page 346), which describes the efforts of Dr. Zakrzewska to establish a training school in connection with the New England Hospital for Women and Children.

Miss Richards voices the dauntless courage that enabled the early pioneers to persevere despite innumerable difficulties. This is just as necessary today, and who knows but that our successors in the years to come may look back on our struggles from a vantage point similar to Miss Richards', and see as much cause for congratulation, even though our progress seems at times slower than a snail's pace. It is stimulating to think of the vitality and optimism of this remarkable woman, eighty years young, addressing a graduating class, and never alluding to her own share in helping to bring about the changes she enumerates.—EDITOR.

Dr. Drew has honored me by asking me to speak to the nurses of the graduating class this evening. It is always a pleasure to say a few words to a class that stands on the threshold between the doors of the years spent in gaining their education and the wide world into which they go to accomplish so much good for God and humanity. You are to realize that when you graduate from this school you have by no means completed your education, but must know that it has just begun. By your training you have been fitted for the larger and broader education which is to be yours. You have received your training under most favorable conditions, and that you may more fully realize your blessings, I will compare your advantages with those of the pioneer nurses.

You have a beautiful and comfortable home to which you can go for rest when off duty, leaving the world's work and care to those who take your place. You have an eight hour day and night service. The pioneer nurses had a fifteen hour service, with their rooms opening off the wards and in some hospitals with a window between the wards and the nurse's room, so that the nurses while off duty for a little while could look into their ward to see that all was right. You have received every step of your education from trained and progressive teachers. The pioneer nurse had no teachers. Orders were given, and these orders were carried out by them as best they could, often in a manner which received criticism. The

early nurses had no half days off duty. Every other week three hours was given them. Church privileges were seldom given; when such came, they were counted great blessings.

You, today, are instructed in every branch of your work, with no fear that your instruction will encroach on forbidden ground. The early nurses were carefully kept from certain knowledge which was thought to belong only to the doctors. So often we heard that "A little knowledge was a dangerous thing for a nurse." Today all such thoughts have passed away and nurses are not only expected, but required to know all things which will add to their proficiency. In the early days, doctors did not like trained nurses, often expressing the fear that they would become doctors. They were far from being friendly. As the years have gone by and nurses by their good work have proved themselves of great service to doctors and humanity, the attitude of the medical profession has changed to respect and appreciation; and today as you enter the field which you have not yet tried, you meet friends who are ready to assist you in any way possible. Consider, I ask you earnestly, all the blessings under which you have received your education. You have been in one of the foremost hospitals in the state, with a superintendent who has in all ways given you every advantage in his power, and with a superintendent of nurses who stands in the foremost rank of our profession, and with able instructors in every branch of your work.

Very great and grave responsibilities rest upon you individually, and as a class, for you are to be representatives of one of the grandest professions. Yours is to be a work for God and humanity. If you would succeed, you must enter into your work with your whole soul. You are to work for the uplifting of your profession and for the betterment of humanity. You are to be loyal to your hospital, your school, your alumnae, your companions, your teachers and your profession. You are to keep in touch and sympathy with all advance movements. You are to be brave, courageous, gentle, kind; a friend to all who suffer; and strength to the weak. You are to carry good cheer to the disconsolate and in every step of the way prove yourselves real nurses and God-fearing women. And as you carry blessings to others, untold blessings will come to you.

FIFTY SCHOOLS MAY UNITE IN PRELIMINARY NURSING COURSE

If the recommendations of the Hospital Association of Philadelphia and the Philadelphia League of Nursing Education are carried out, this month all schools of nursing in the city will send their students to the University of Pennsylvania for a preliminary course in nursing education now being taught in fifty separate training schools in Philadelphia and the vicinity. The curriculum to be adopted is that prepared by the National League of Nursing Education. Subjects are to be taught by qualified instructors now teaching in the Philadelphia Training School for Nurses. The committee's plan is that the course be only experimental. If successful, it will probably be continued for those students entering training schools in September.

"To go about with one of the public health nurses and watch her ministrations on a morning round is to consider in amazement what loss of life might be prevented if such 'stitch in time' service were in effect everywhere."—Selected.

*Address to graduating class of the City Hospital, Worcester, Mass., by Linda Richards.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES,
Supervising Dietitian, Mt. Sinai Hospital, New York.

HOSPITAL TRAINING OF DIETITIANS AT PETER BENT BRIGHAM HOSPITAL

BY OCTAVIA HALL, HEAD DIETITIAN, PETER BENT BRIGHAM HOSPITAL, BOSTON.

"A PERSON versed in dietetics" is the non-committal manner of defining a dietitian in the latest Standard Dictionary. The latest Webster's and all encyclopedias apparently wish to avoid the subject altogether; no mention is made of this class of person. It was then necessary to formulate a definition of a dietitian and it immediately became obvious why this word was left out of the dictionary. A person versed in dietetics who not only has ability to impart this knowledge to others and who is able to administrate all procedures necessary for the carrying out a dietary plan, may be somewhat of a definition of a dietitian. From this definition it is evident what the purpose of the college woman entering a hospital to train as a dietitian should be. It is first necessary, however, to set some definite standard to aid in determining the type of person who will best serve as dietitian.

A college woman with a B.S. degree and a major in home economics is best adapted for this purpose. She should have reached the age of discretion and should possess a degree of poise necessary for one in an administrative position. This seldom comes before the age of twenty-four or five. It is very necessary in assuming the responsibility of training a dietitian to have first a complete estimate from her college or university of her ability for such work, her shortcomings, and if possible, something of her home environment. The element of personality is equally as important as training. Personal appearance also has much significance. The psychology of the effect of stature in administrative work is important. Women who are very small of stature find the work much more difficult. This is not gainsaying the fact, however, that many small women have been extremely successful in administrative positions. Personal tidiness and cleanliness of uniform are essential. A professional attitude at all times is very necessary. This attitude must be relieved, however, by a ready sense of humor in the times of stress and strain which come now and then in dealing with numbers of people. A dietitian, too, must always have her temper under control. It can *apparently* be lost for forceful emphasis upon some point, but in reality, *never*.

The student entering upon her duties at Peter Bent Brigham is given a printed list of instructions as to hours of duty, personal appearance and behavior while on duty.

The main kitchen of the hospital is the first "piece de resistance" given to the student. A month is generally spent here. Instructions are given students to watch each worker individually for a period so that she may learn all duties in particular. The kitchen as a whole and the preparation of all the parts of a meal present themselves as the next problem. When the matron in charge of the kitchen is absent one afternoon a week and on alternate Sundays, the supervision of the kitchen is given to the student. This gives her an opportunity for actual experience in handling people. During the first month an interview is had with the student and the type of work she wishes to do after leaving the hospital is discussed; attention is drawn to special points in the course having bearing upon her future work.

The student dietitian is next sent to the main serving room. Four dining rooms accommodating in all, over 300, are served from this central room. The service of food and the managing of employees who serve it is the point to be studied. Emphasis is laid upon uniform servings of food served attractively and hot, if it should be hot, or cold, if it should be cold. The care of the dining rooms, the neat appearance of tables and clean dishes must be drawn to her attention. The pleasure of eating well cooked food may be completely destroyed by the appearance of an untidy plate, too large a serving, and poor service upon the part of the waitress, it must be brought out. All of these points are important ones to the dietitian. The actual supervision of the serving room is also given to the student when the matron in charge is away.

Computation of Diets

A week's experience is given next in the Infant's Hospital which is situated across the street. Here the student learns much of the computation and preparation of many kinds of formulae. The modification of milk and preparation of diluents of every description are taught in the most scientific manner. This work is often found helpful after entering upon the duties of the diet kitchen, as formulae are at times ordered for patients in the hospital.

The first few days in the diet kitchen are spent with the nurse who weighs the food for the diets. It is most necessary for the dietitian to be familiar with the weights of food in order to compute diets understandingly. She

must know that 100 grams of lettuce is too much for a salad and how many grams of meat is a moderate serving. Time is spent with the three nurses in the diet kitchen learning their duties and division of work. After the student has the administrative end in mind, she is next given instructions as to the calculation of weighed diets. The main points to be considered in writing a diabetic or nephritic diet, for example, are explained by the assistant dietitian. The diets are carefully gone over, and any dietetic errors are pointed out and explained to the student so that a repetition of error may not be made. Visits conducted by the dietitian to the patients and notes concerning the diet are made. The foods which are liked and disliked are noted, bedside charts examined, and the patient's condition with reference to his diet observed. Ward kitchens are visited at the meal time. The importance of the condition in which the diet arrives from the diet kitchen is emphasized as one cannot expect to have an attractive tray served to the patient if the food has not been properly transported to the ward.

Seven weeks are spent in the diet kitchen, during which time a schedule of visits is planned to other hospitals, dispensaries, and clinics and time is given to follow this schedule.

Experience in Ordering Supplies

While in the diet kitchen, the student is given experience in ordering daily and weekly supplies; she also keeps the daily cost of supplies and computes the per capita cost once each week. A graphic chart is kept of the rise and fall of expense. This is found to be helpful and is also an incentive for a student to be more economical than the preceding one.

One week is spent in the dietitian's office. The accounting system for the department is studied and the hospital store is visited. Here the system of handling foods, checking in supplies and sending out of supplies is explained.

A visit to the market in company with the dietitian and the superintendent is planned. Marketing on a large scale is done and the policy of dealings made as clear as possible. Buying can never be taught by observation; actual experience is necessary, and as no hospital will ever trust a student dietitian to do this work, she gets little real benefit from her trip to market.

Menu writing for private patients and ward patients, doctors, nurses and employees, is next taught the student. The requisitioning of food from the store is at first always a difficult problem; the amounts per person of meats, vegetables, and groceries have to be learned. Classification of food for the convenience of the steward and bookkeeper must be born in mind also.

Weekly Student Conferences

Every Tuesday afternoon, a conference with the students is planned. At these meetings, subjects of dietetic interest are discussed and problems which come up daily are talked over. Stress is laid upon the fact that the hospital is for the patients, and that efficient service to them and to those who care for the patients is their first duty. The instruction of nurses in dietetics is discussed and a suggested outline given. Classes in cookery for the nurses conducted by an assistant dietitian may be attended by the student and, at times, actual practice in teaching the nurses given.

A month may be added to the course if desired and spent in the metabolism laboratory. Here the student dietitian learns to do the metabolism of patients and becomes fairly accurate in gas analysis. The doctor in

charge assigns daily readings and a short lesson is given each day.

Last March a nutrition clinic was started at Peter Bent Brigham and now the student who wishes to enter social dietetics work may spend extra time in this clinic. Almost every common type of disease that can be treated by diet is referred here, and much experience may be had in clinical dietetics. Visits to the Boston Dispensary Food Clinic are planned and methods compared.

The half day that the student has free from duty each week and every other Sunday are given as much as possible in company with some one other student or with an assistant, as it is important to keep the student from being lonesome since her hours of work in the hospital are long and tiresome.

Hospital Independent of Student Help

The hospital, however, does not depend upon the work of the student dietitian. At any time, the system could go on without student help. This seems wise for two reasons:

1. The dietitian would feel obliged at times to train a student who did not come up to set standards in order that the necessary work of the department might go on.
2. Student dietitians should not be exploited for the work a paid employee can do.

Within the last two and a half years in the Peter Bent Brigham Hospital, twenty-six student dietitians have taken the course. All but two were college or university graduates with a B.S. degree. These two had a course in a normal school and each had had two years' experience as dietitians in addition to their schooling. Eighteen of the students are now engaged in hospital work; four are married; two are teaching home economics; one is doing Red Cross nutrition work; and one is not engaged in dietetic work.

With this summary it seems well to add what future improvements are hoped for in the course:

1. Lectures will be given every few months by a resident physician and who will explain the medical aspect of diseases in relation to diet, such as the different kinds of nephritis, diabetes, typhoid fever, etc.
2. More work in the nutrition clinic will be planned as the clinic increases in size.
3. A few days will be spent in the housekeeper's department. This has two objects in view: first, to learn points in general hospital housekeeping, the methods used in the hospital laundry, linen rooms, and sewing room; and second, to learn the housekeeper's point of view. It is hoped that this will help to bring about a more complete spirit of cooperation between the two departments.
4. More time will be spent in training the student to plan menus and service of food for private patients.
5. Upon completion of a new nurses' home, rooms will be provided by the hospital for the student dietitian. The hospital does not derive enough benefit from the service of a student to pay for rooms outside of the institution. However, board, laundry, and free medical care in case of illness are always given.

By following out these improvements and always looking for suggestions for betterment, Peter Bent Brigham Hospital hopes to attain the aim of dietetics, which is the application of the science of dietetics to bring about health, economy and pleasure.

Miss Helen Glasier, another Cornell graduate, is assistant dietitian at Mount Sinai Hospital, New York. Miss Glasier had student dietitian training at Buffalo Homeopathic Hospital.

FEEDING HIGH FAT DIETS IN DIABETES

By MISS DOROTHY M. STEWART, SPECIAL DIETITIAN, UNIVERSITY OF MICHIGAN HOSPITAL, ANN ARBOR, MICH.

SINCE the publication of the data* on high-fat feeding in diabetes, frequent inquiries have been received as to the dietetic management of such a scheme. The refrain we hear most consistently is: "We can't get the patients to eat it." Inasmuch as we have not experienced that difficulty, it has been suggested that there may be some points of interest in our food care of these patients.

One never realizes so keenly the nicety of the balance in a normal ration until that balance is no longer possible to keep. Any change in the relative amounts of the food-stuffs brings us to the problem of so choosing and adjusting the food that it not only satisfies the requirements of an abnormal metabolism but also resembles, as nearly as possible, a normal ration. The situation of the patient corresponds to that of the foreign-born coming to a land of new food customs. The foods to which he has been accustomed he cannot have. He is lost. Anything that even looks familiar is a wellspring in the wilderness. And so the arrangement of food in the meal and in the day, as well as its palatability, are points that need to be considered in planning dietaries for the diabetic.

In a normal diet, fat is carried by the protein and carbohydrate. We eat it as butter on our bread and vegetables. It occurs with the protein of meats. When the protein and carbohydrate of the diet are cut down, the quantity of fat which would ordinarily be served proportionately decreases. If, for example, we compare a normal ration of 75 grams protein, 85 grams fat and 300 grams carbohydrate with a diabetic diet of 55 grams protein and 35 grams carbohydrate, it becomes evident that in order to obtain a fat content of 200 to 225 grams, considerable forcing must be done. It must also be more or less camouflaged in order to be palatable and avoid gastric disturbances. Here we use a liberal amount of forty per cent cream in ice creams, custards, cream soups, gelatine desserts and salad dressing. Mayonnaise dressing furnishes fat in a concentrated form and can usually be used freely. Ice creams made of cream sweetened with saccharin and flavored are a welcome item on the menu and contribute generously to the fat total. For one or two servings it may be simply prepared by putting metal cups in a pan of ice and salt, and stirring from the edge as it freezes. Custards yielding a minimum of protein and a maximum of fat may be made with cream and egg yolks. Jellies serve as an excuse for whipped cream and vegetables for butter and salad dressings, and so on down the list.

Following are a few recipes:

BAKED CUSTARD

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Egg yolks, 2.....	3 gms.	4.70	10.00	....	109.0
Cream, 40%.....	70 gms.	1.54	28.00	2.10	266.7
Vanilla.....	4 drops	....	....	....	....
Saccharin.....	¼ gr.	....	....	....	....
Totals.....	....	6.24	38.00	2.10	375.7

Beat egg yolks with fork, add cream, then saccharin dissolved in vanilla. Bake in a pan of water in a slow oven until knife will come out clean.

*Newburgh, L. H., and Marsh, Phil L. Arch. Int. Med. 26, p. 647, 1920.
Newburgh, L. H., and Marsh, Phil L. Arch. Int. Med. 27, p. 699, 1921.

NUT CHARLOTTE

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Cream, 40%.....	70 gms.	1.54	28.00	2.10	266.7
Walnuts.....	10	1.84	6.44	1.30	70.3
Saccharin.....	¼ gr.	....	....	....	....
Vanilla.....	4 drops	....	....	....	....
Totals.....	....	3.38	34.44	3.40	337.0

Whip cream, add finely chopped nuts, then saccharin dissolved in vanilla.

ORANGE JELLY

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Gelatine.....	5 gms.	4.57	....	....	14.8
Cold Water.....	1 Tb.	....	....	....	....
Boiling Water.....	½ c.	....	....	....	....
Orange juice.....	10 gms.	....	....	1.08	4.3
Saccharin.....	¼ gr.	....	....	....	....
Cream, 40%.....	30 gms.	6.66	12.00	.90	114.8
Totals.....	....	5.23	12.00	1.98	133.4

Soak gelatine in cold water two minutes. Dissolve in boiling water. Add saccharin dissolved in orange juice. The cream may be served with the jelly or whipped and folded in when the jelly is partly stiff.

CHOCOLATE PUDDING

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Cream.....	100 gms.	2.20	40.00	3.00	381.0
Cocoa, ½ tsp.....	1 gm.	.21	.28	.37	4.9
Agar agar.....	1 tsp.	....	....	....	....
Vanilla.....	½ tsp.	....	....	....	....
Saccharin.....	....	....	....	....	....
Totals.....	....	2.41	40.28	3.37	385.9

Mix cocoa with agar, add cream and steam in pan of hot water for 20 minutes. Add saccharin dissolved in vanilla and chill.

CREAM DRESSING

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Cream.....	350 gms.	7.70	140.00	10.50	1333.5
Egg Yolks (8).....	120 gms.	18.84	39.96	....	435.6
Salt, 1½ tsp.....	10 gms.	....	....	....	....
Pepper, ¼ tsp.....	....	....	....	....	....
Mustard, 2 tsp.....	125 gms.	....	....	....	....
Vinegar.....	70 gms.	.70	59.50	....	538.3
Butter.....	....	....	....	....	....
Totals.....	....	27.24	239.46	10.50	2307.4
Per 50 gms.....	....	2.01	17.73	.77	170.9

Add scalded cream to beaten egg yolks and cook in a double boiler, stirring constantly until mixture forms a smooth coating on the spoon. Add melted butter, then seasonings mixed to a smooth paste with vinegar.

MAYONNAISE

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Egg yolks, 6.....	90 gms.	14.13	29.97	....	335.7
¼ c. vinegar.....	120 gms.	....	....	....	....
Oil, 1 qt.....	700 gms.	....	700.00	....	6300.0
Mustard, 1 tb.....	30 gms.	....	....	....	....
Salt, 2 tb.....	....	....	....	....	....
Paprika, ½ tb.....	....	....	....	....	....
Totals.....	940 gms.	14.13	729.97	....	6635.7
Per 50 gms.....	....	.75	38.82	....	352.9

Mix dry ingredients, add egg yolks and beat slightly. Add one half the vinegar and mix well. Add oil slowly, beating constantly until all is added. Thin if necessary with rest of vinegar. If dressing should curdle, take three egg yolks and add curdled mixture to them, slowly beating as though it were oil.

TOMATO JELLY

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Tomatoes	100 gms.	1.20	.20	4.00	23.0
Gelatine	5 gms.	4.57	....	....	18.3
Cold water .....	.....	....	....	....	....
Salt, 1/4 tsp. ....	.....	....	....	....	....
Pepper, paprika and celery salt .....	.....	....	....	....	....
Totals .....	.....	5.77	.20	4.00	41.3

Soak gelatine in cold water two minutes. Dissolve in boiling tomatoes, add seasoning and chill. Serve on lettuce with mayonnaise or cream dressing.

VEGETABLE SOUP

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Celery	5 gms.	.05	....	.15	1.0
Carrots	20 gms.	.22	.08	1.86	9.0
Onions	5 gms.	.80	.01	.49	2.4
Cabbage	5 gms.	.08	.01	.28	1.6
Butter	15 gms.	.15	12.75	....	116.3
Broth .....	.....	....	....	....	....
Totals .....	.....	1.30	12.85	2.78	130.3

Chop vegetables finely and brown in butter. Add broth and simmer until tender. Season with salt and pepper.

Four Standard Diets

Our scheme of diabetic feeding is a series of four standard diets.

Diet No. I yields 18 to 22 gms. protein, 12 to 15 gms. carbohydrate, 800 to 1,000 calories.

Diet No. II yields 25 to 30 gms. protein, 18 to 22 gms. carbohydrate, 1,200 to 1,600 calories.

Diet No. III yields 30 to 35 gms. protein, 25 to 30 gms. carbohydrates, 1,600 to 2,000 calories.

Diet No. IV yields 50 to 60 gms. protein, 30 to 40 gms. carbohydrate, 2,000 to 2,500 calories.

DIABETIC DIET No. I

Standards:

Protein, 18-22 gms.; Carbohydrate, 12-15 gms.; Calories, 800-1,000.

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Dinner					
Boiled ham	25 gms.	5.05	5.60	....	70.5
Cabbage with vinegar, salt and pepper	50 gms.	.80	.15	2.80	16.0
Asparagus with butter	90 gms.	1.35	.09	2.52	16.2
Tea broth	20 gms.	.20	17.00	....	153.8
Supper					
Bacon with spinach	15 gms.	1.57	9.72	....	93.7
String beans with French dressing	90 gms.	1.89	.27	2.58	21.6
Oil	90 gms.	2.07	.27	6.66	17.8
Vinegar	30 gms.	....	30.00	....	270.0
Salt, pepper, paprika	15 gms.	....	....	....	....
Tea broth .....	.....	....	....	....	....
Breakfast					
Bacon with egg (1)	15 gms.	1.57	9.72	....	93.7
Coffee broth .....	.....	6.70	5.25	....	74.0
Totals .....	.....	21.20	78.07	14.56	827.3

Most of our patients are discharged on Diet No. IV, which, it will be seen, is a distinctly liberal diet. Samples of Diets I and IV are given, which illustrate the general plan of working in the high fat.

There is ample opportunity for exercise of humanity in planning food for patients of this type, for few there be of us whose outlook on life is not more or less influenced by the meals that are set before us. And if this is true of normal individuals, what of those whose food

is a matter of life and death to them. A little understanding and imagination added to the diet go a long way both from the patient's point of view and the dietitian's. For, after all, what remains on the tray is as much an aggravation to the dietitian as it is a disappointment to the patient.

DIABETIC DIET No. IV

Standards:

Protein, 50-60 gms.; Carbohydrate, 30-40 gms.; Calories, 2,000-2,500.

Food	Amt.	Pro. gms.	Fat gms.	Carbo. gms.	Calories
Dinner					
Roast chicken ...	100 gms.	19.30	16.30	....	224.0
Squash with butter	120 gms.	1.63	.60	10.80	55.2
Head lettuce with Thousand Island dressing	10 gms.	.10	8.50	....	76.9
Mayonnaise .....	.....	.72	.18	1.74	14.4
Pickles (chopped)	50 gms.	.75	38.82	....	352.9
Pimento	10 gms.	.08	.02	.81	1.7
Celery	10 gms.	.16	.01	.45	2.7
Olives	60 gms.	.66	.06	1.96	11.4
Ice cream	30 gms.	1.24	6.06	2.55	65.7
Coffee	90 gms.	1.98	36.00	2.70	342.9
Supper					
Oyster stew:					
Oysters	30 gms.	1.80	.39	.99	14.7
Cream	90 gms.	1.98	36.00	2.70	342.9
Hot water to fill bowl .....	.....	....	....	....	....
Cabbage salad:					
Cabbage	50 gms.	.80	.15	2.80	16.0
Onions	10 gms.	.16	.03	.99	4.9
Pimento	10 gms.	.16	.01	.45	2.5
Mayonnaise	50 gms.	.75	38.82	....	352.9
Orange jelly ...	1 recipe	5.23	12.00	1.98	133.4
Tea .....	.....	....	....	....	....
Breakfast					
Grapefruit	50 gms.	.39	.10	5.04	23.0
Bacon with two eggs .....	.....	2.62	16.20	....	156.2
Coffee with cream	25 gms.	13.40	10.50	....	148.0
Broth	30 gms.	.66	12.00	.90	114.3
Totals .....	.....	53.62	232.75	36.36	2456.6

NEWS ITEMS

Miss Eleanor Wells has charge of the entire dietary department of the Maryland State Normal School at Towson. There are 400 girls in the dining halls of this school.

Mrs. A. W. Loudon is doing nutrition work at the University of North Dakota. Mrs. Loudon was formerly dietitian at St. Luke's Hospital, Fargo, N. D., and may be better known to some as Dorothy Ayers.

Mrs. O'Dea of Johns Hopkins has had the unique experience of training four new assistants in three months' time. Miss Louise Yeomans, a graduate of Wisconsin, has been given supervision of the diet school, with Louise Canham, University of North Dakota, as her assistant. Miss Esther Wright, Kansas State College of Agriculture, is another of Mrs. O'Dea's assistants, and Miss Phyllis Rowe is able once more to take up her duties after an illness of almost three months.

Miss Susan Walker is now at the Woman's Hospital, Cleveland, as dietitian. Miss Walker was dietitian at Mount Sinai Hospital, New York, for some time.

Miss Ellen Gladwin has given Miss Loraine Van Wageningen the appointment as her assistant. Miss Van Wageningen is a graduate of the home economics department, Cornell University, and took student training with Miss Gladwin at Jefferson Hospital.

The December meeting of the New York Association of Dietitians took the form of a dinner held at the Y. W. C. A. building on December 14. There was a large attendance, and interesting program and an excellent dinner. Miss Lulu Graves and Mrs. Mary de Garmo Bryan were guests of the evening and both gave short talks in addition to the regular program.

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by FRANK E. CHAPMAN, Director
Mt. Sinai Hospital, Cleveland, Ohio

CRUSHED ICE CONTAINERS FOR THE HOSPITAL

A RECENT questionnaire directed by THE MODERN HOSPITAL to a number of hospitals of varying size disclosed the fact that in many of these institutions primitive and makeshift methods are being employed in chipping ice and in the transportation and storage of it. Although in many hospitals modern methods are employed, in others nurses are called upon to chip ice with an ordinary hand pick or to crush it in a bag on the ward floor.

Commercial houses have made a study of the various problems connected with the use of chipped ice in the hospital and have provided means not only for crushing ice, but for its proper storage with resultant convenience and unnecessary waste.

There is a considerable difference in the routine practiced in various institutions in the preparation of chipped ice. In some hospitals the ice is crushed in one of the main service rooms and transported to the various wards for storage in refrigerators provided for that purpose. In other institutions individual ice crushers are placed in each ward. There are arguments in favor of both of these methods, but, from the statements of manufacturers as to the types of ice chippers sold, it would seem

that the practice of having a central plant for chipping ice is gradually being done away with because of the meltage of ice in transportation and the inconvenience attending its delivery.

To avoid such difficulties, manufacturers recommend the use of a small hand ice chipper, similar to that shown in Fig. 1. This is generally installed in the ward kitchen or service room and the ice is chipped by the nurse when needed. The ice is delivered to the service rooms in small cakes of proper size for use in the chipper and is stored in the ordinary ward refrigerator, where it aids meanwhile in refrigeration.

The power type of ice chipper is usually installed in the main kitchen or in one of the adjoining service rooms in close proximity to the refrigerating plant or the large storage refrigerator. Such an installation as is shown in Fig. 2 is designed to crush ice for use in every part of the institution, for wards, ice cream freezers, and such kitchen purposes as needed.

In Fig. 3 the illustration shows a typical installation of the ice breaker and also the ice cream freezer and similar equipment. The convenience of such an arrangement is at once apparent



Fig. 2.



Fig. 1.



Fig. 3.

and might well be considered as ideal where the large power ice breaker is employed.

There has recently been introduced a combination ice crusher and refrigerator which apparently has many ad-

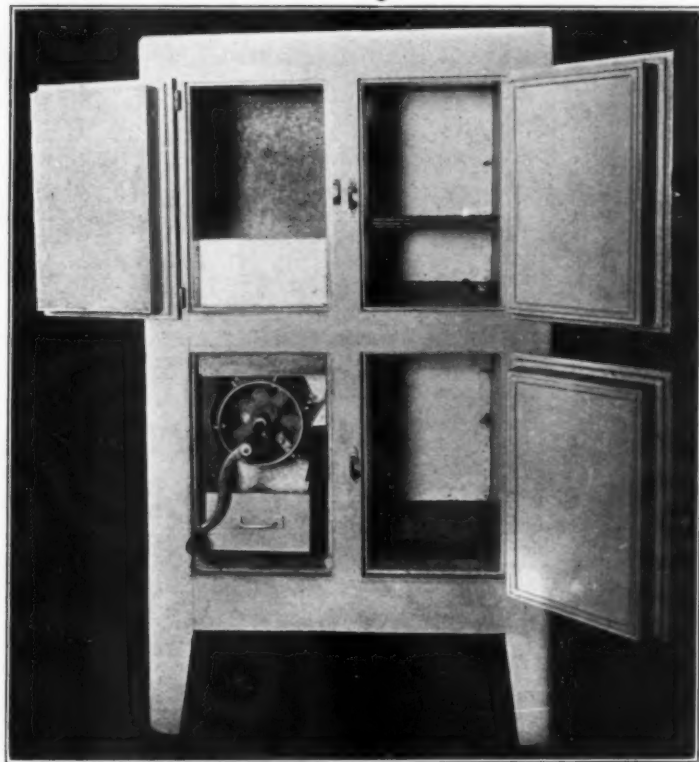


Fig. 4.

vantages over types now on the market. This outfit consists of a refrigerator of the type customarily employed in ward kitchens or service rooms, which has two large

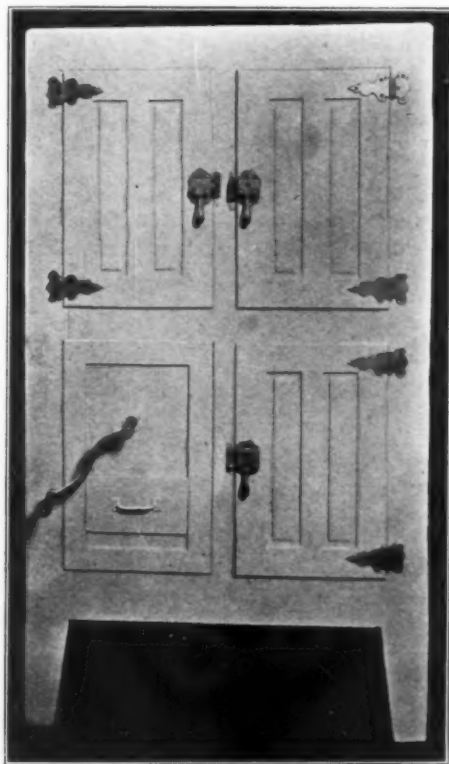


Fig. 5.

compartments for food. The ice compartment is likewise similar to the ordinary refrigerator, with the exception that the bottom of this compartment is really the top of an ice crusher or chipper. Directly below the ice chipper

is a galvanized iron drawer for holding the ice when chipped. Fig. 4 shows this refrigerator with the doors open revealing the ice chipper with drawer below. Fig. 5 shows the same refrigerator with the doors closed but with the handle of the ice chipper projecting through the lower door directly above the drawer for the chipped ice.

Assuming that this new equipment is practical in design, it would seem to offer a plausible and practical solution of the chipped ice problem in the hospital. It permits the ice to be delivered to the ward refrigerator in a single large cake. The ice can be chipped or crushed without opening the door of the refrigerator and it is not necessary to chip it in large quantities. The small amount that may be retained in the drawer is kept from melting by the temperature of the refrigerator and likewise it is an aid to general refrigeration. Drainage is provided for in connection with the drainage from the ice box and the convenience and economy of the entire plan are obvious.

Another concern has recently introduced an insulated container, designed not only for storage but for transportation of chipped ice throughout the hospital. (Fig. 6.) This is not a large or cumbersome device but is designed for use in a single ward. The suggested routine for use of this equipment is to have the container filled with chipped ice at a central ice breaking plant and then wheeled to the ward where it is to be used. The thorough insulation of the container insures a minimum melting of ice; the fact that it can be easily wheeled would permit the filling of ice bags, if desired, at the bedside of the patient. A stopcock and drain are provided so that the accumulated water in the container can easily be drawn off. The container is similar in design to a single compartment fireless cooker, and being mounted on a wheeled



Fig. 6.

carriage, it provides not only storage but easy transportation of the chipped ice about the hospital.

There are a considerable number of ice boxes designed solely for the storage of crushed ice. Fig. 7 is a standard type of such a box, in this instance being made with a counter-balanced hinged top; it is the same type

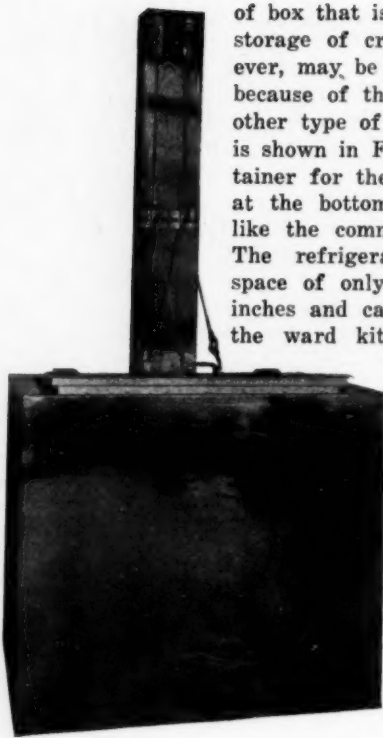


Fig. 7.

of box that is used in hotels for the storage of cracked ice. This, however, may be open to some criticism because of the space required. Another type of individual refrigerator is shown in Fig. 8. In this the container for the crushed ice is hinged at the bottom and opens somewhat like the common type of flour bin. The refrigerator occupies a floor space of only two feet by eighteen inches and can readily be placed in the ward kitchen or service room

where it is at all times ready of access and where connection can be made with a floor drain; although, if desired, the water can be drawn off into a container. The cabinet shown is of high type construction, the exterior being of high grade porcelain enamel and the interior heavily galvanized. The cabinet has a capacity

of sixty pounds of crushed ice. It is thoroughly insulated so that there is little wastage by melting. This type of box is being installed in the St. Joseph Hospital, St. Paul, Minn.

In many hospitals, however, it is desirable to incorporate the container for crushed ice in a larger refrigerator. Such a plan has apparent advantages. It insures a minimum melting of the crushed ice, and the crushed ice itself serves a refrigerating purpose while being stored.

In one of the larger eastern hospitals there has recently been installed several refrigerators with compartments designed particularly for the storage of crushed ice. These refrigerators are of the counter type, the various compartments being placed side by side. Such an arrangement is in itself very convenient as it provides a highly satisfactory working top for the nurse.

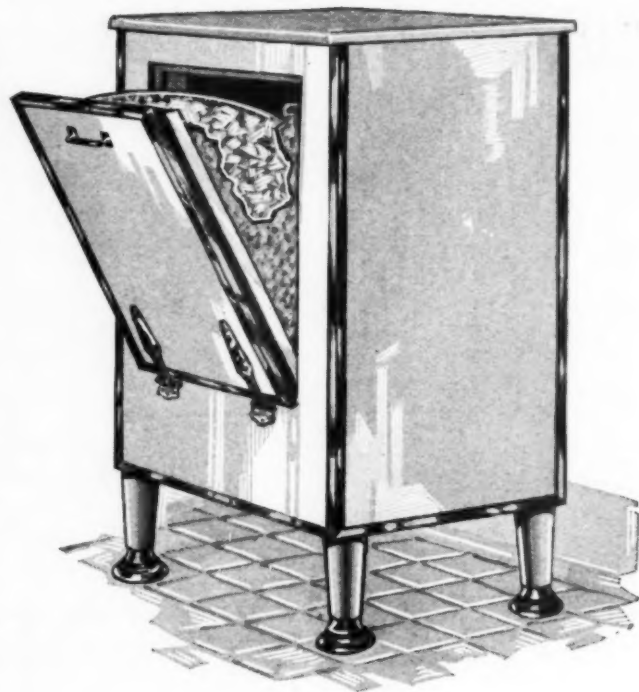


Fig. 8.

In Fig. 9 one type of these crushed ice compartments is shown. It consists of a triangular receptacle fastened to the door and opening with it. The container itself is removable so that it may be taken from the refrigerator and filled elsewhere. The chief benefit of this arrangement lies in this fact. It has the drawback, however, that when open there is no arrangement for drainage and an unsanitary and unsatisfactory condition around the refrigerator results.

A more satisfactory arrangement is shown in Fig. 10. In this the ice compartment is in the form of a tilting bin, hinged at the bottom. This is very convenient; it provides facilities for constant drainage and can not be left open. The general design of the compartment is similar to the individual refrigerator shown in Fig. 8.

Probably the most common type of crushed ice container is the kind installed in the ward refrigerators in St. Mary's Hospital, St. Louis, Mo., shown in the drawing

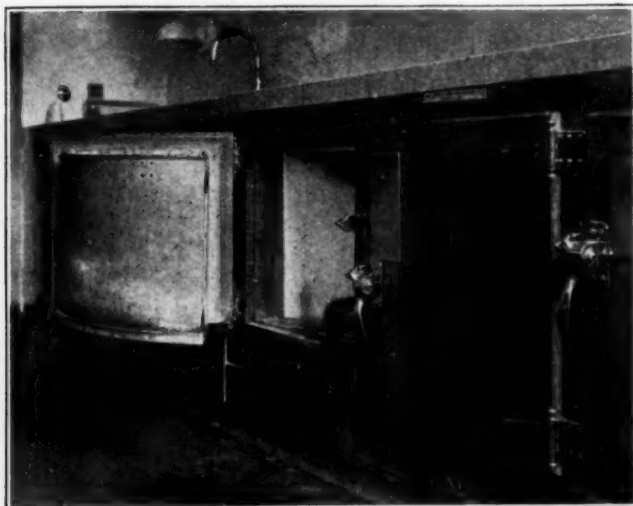


Fig. 9.



Fig. 10.

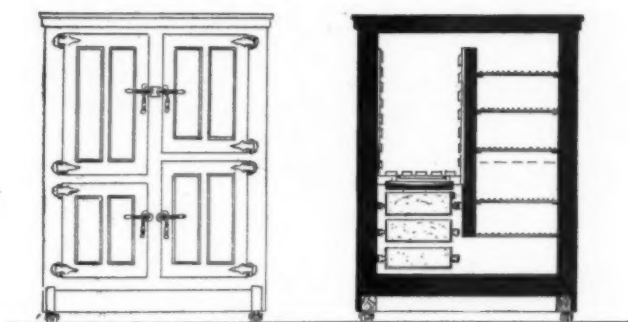


Fig. 11.

in Fig. 11. In this refrigerator one of the lower compartments has three galvanized iron drawers which are used solely for crushed ice. These are readily removable for filling and are so arranged that drainage is taken care of along with the drainage from the refrigerator proper. Since the crushed ice container is a part of the large refrigerator, melting is reduced to a minimum and the chipped ice serves a refrigerating purpose while in storage. Against this model may be raised the objection that the refrigerator must be opened whenever chipped ice is needed; there is likewise the possibility of carelessness in keeping the compartment properly closed. These details, however, may be readily overcome in the majority of hospitals.

Descriptions of these various methods of handling crushed ice should not only be of value to institutions in solving their particular problems, but they emphasize the fact that commercial houses today are studying hospital requirements and in the majority of instances are able to offer equipment to meet their particular needs. This co-operation removes the necessity of employing makeshifts which in the end prove more expensive than commercial devices marketed in quantity.

LIBRARY CARTS ARE NOW OFFERED

Many hospital superintendents do not realize how closely manufacturers of hospital equipment study various institutional problems and seek to provide equipment meeting new requirements. Here is a definite instance:

Recently several articles have appeared in *THE MODERN HOSPITAL* describing library service in hospitals. Mention was made in these articles of library trucks or carts used for distributing books about the institutions. Hitherto these library carts have been "homemade" affairs; or in some cases superintendents have used food carts, stretchers and other forms of regular equipment for transferring books.

Such methods, however, are more or less makeshift and while meeting the immediate need do not completely fulfill the requirements. Two manufacturers have recently introduced specially designed library carts or trucks which will conveniently carry books about the hospital. This ready cooperation should emphasize to all hospital executives the fact that commercial concerns are always ready to furnish any new device or new convenience in the way of hospital equipment and that greater economy can be realized if such matters are taken up with them promptly.

A new idea in a library truck is shown in Fig. 1. The upper part of this truck is designed like a book trough, the books resting at an angle on either side of the truck. Not only does this method of construction make the books more accessible and the titles more readily visible, but it has an added advantage of keeping the books in position.

The lower shelf of the truck is made with raised edge so that it can be utilized for carrying additional books and magazines. The truck is made throughout of steel with welded joints, mounted on high grade five-inch rubber tired swivel truck wheels, with push handle at either end.



Fig. 1.

The truck is thirty-six inches long, nineteen inches wide overall and has a total height of thirty-nine inches. As a pleasing change from the customary white enamel finish, the manufacturers are supplying the cart in a grained mahogany which is at once distinctive and attractive.

Another type of library truck is shown in Fig. 2. This truck likewise is made of steel with welded joints and is



Fig. 2.

furnished with three roomy shelves. The truck is twenty-six inches long, sixteen inches wide and forty-eight inches high. The rubber tired wheels at one end are swivel; the others are stationary.

This truck is very substantially built and is easily operated, a push handle being supplied as shown in the illustration. The manufacturers in designing the truck have made it to accommodate two rows of standard size volumes on each shelf. White enameled finish is regularly furnished.

AN ELECTRICALLY OPERATED JUICE EXTRACTOR

A recently designed juice extractor offers many advantages for institution use and may be used for oranges, lemons or similar fruits.

The outfit is made throughout of acid-proof, white metal and is extremely simple in construction. It consists of extracting bulbs in several sizes, which revolve 2,000 times per minute. The fruit is simply cut into halves and applied to these rapidly revolving bulbs, which instantly extract the juice and cells without getting any of the rancid oil from the skin of the fruit. A small direct-connected electric motor furnishes the power for the extractor.

One of the biggest economies gained from the use of this extractor is that a cheaper grade of oranges or lemons may be utilized. As every buyer knows, both oranges and lemons are graded according to size, this grading being according to the number of the fruit which can be packed in standard cases. Through the use of the electric extractor described, the smaller and less expensive fruit may be utilized instead of the larger and fancy grades.



The use of this extractor enables the hospital to utilize less expensive grades of fruit.

There are ten commercial grades of oranges, ranging from eighty to the case up to 324, or twenty-seven dozen, to the case.

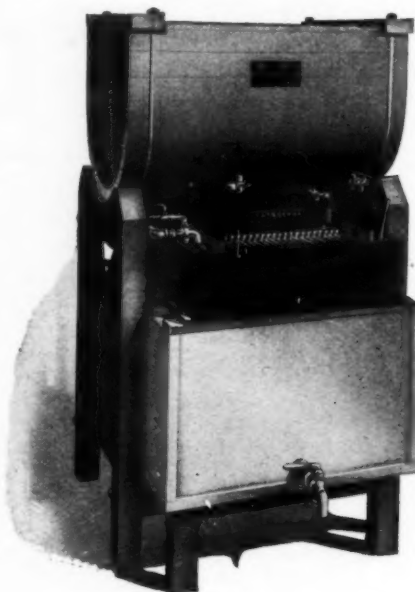
There are seven commercial grades of lemons, ranging from two hundred and forty to the case up to 490.

Hospitals will find that the smaller, less expensive sizes give an abundance of juice, and this size can generally be purchased at a lower price as it is not in as great demand for general household use.

ELECTROLYTIC BLEACH OR DISINFECTOR

Considerable interest has been manifested among hospital superintendents in an electrolyzer designed for making either an electrolytic bleach for laundry purposes or a hypochlorite adapted for disinfectant and germicidal purposes.

While the device illustrated was primarily intended for the manufacture of laundry bleach, its adaptability



to other hospital uses makes it a valuable and money-saving acquisition to hospital equipment.

The product of this machine, commonly known as electrolytic bleach, is formed by the action of a current of electricity upon a brine made by dissolving ordinary salt in water. Pure salt or sodium chloride (NaCl) is composed mainly of two elements, chlorine (Cl) and sodium (Na). To utilize these elements for bleaching purposes, means must be provided to separate them from their original state and add some oxygen. Salt brine is run through the electrolytic cell or cells where the electric current passes through it and decomposes it. This liberates sodium at one pole and chlorine at the other, and in the reaction which follows they recombine with oxygen and form what is known as sodium hypochlorite. The real bleaching agent, therefore, is oxygen confined in sodium hypochlorite (NaOCl).

Bleaching is essential in laundry practice, and, contrary to common belief, it does no harm to the linen, but adds materially to the appearance of the ironed article. It clears up the color of the linen and acts as an antiseptic as well.

The bleaching agent produced is neutral; that is, it is practically free from alkali. It is further claimed that the use of the electrolytic bleach does not hurt the linen but in reality adds to the life of it and imparts to it that much to be desired home-washed "feel."

In addition to its bleaching qualities, the hypochlorite from these electrolyzers can be advantageously used for sterilizing dishes, disinfecting bath tubs and deodorizing toilets and garbage cans. It is a powerful disinfectant, and a cheap one as well, for the cost is about a cent per gallon and at working strength only a fraction of a cent per gallon.

For use in hospitals the electrolytic sodium hypochlorite, in addition to its application for bleaching and sterilizing

linens, is said to have many other advantages. It possesses extraordinary high germicidal action. This germicidal action, tested against organisms under the conditions of the Walker-Rideal test, may be calculated from the experiments of Klein, Sommerville, Walker and Rideal and others. With a chlorine concentration of 1:20,000 it is as active as one per cent phenol, and of course, it is much cheaper. For this reason it may be used freely about the wards and on the floors. At a dilution of 1:1,000 when used on floors there will be a great reduction in the number of organisms. Furthermore, the wards will be fresher, cleaner and freer from objectionable odors. In enteric and dysentery wards the electrolytic hypochlorite when placed in bed pans before use will have a marked deodorant action. It is a true deodorant and because of its cheapness may be used freely.

Because the hypochlorite is in a practically neutral state as it leaves the cell, it may be utilized for making Dakin's solution. It has been thus employed in the Rockefeller Institute with great success.

There are many other uses for this solution, such as deodorizing garbage cans, toilets and urinals; sterilizing drinking cups, dishes and kitchen utensils; prevention of bacterial molds, etc.

The equipment is supplied in varying sizes and capacities.

NEW FOOD MIXER MEETS NEED

A new food mixer has recently been introduced which seems to fill a gap in labor-saving kitchen equipment and which will meet most of the requirements of the kitchen in the small or medium size hospital while in the kitchens



of larger hospitals it will supplement the work of large machines and meet emergency requirements.

This new food mixer is supplied with a 24-quart mixing bowl, and can be operated at two speeds with a convenient gear shift. The outfit stands fifty-five inches

high, but occupies a floor space of only twenty-four by twenty-three inches. While substantially constructed, it is light enough to be moved about without difficulty. It can be supplied either with or without the floor stand shown in the accompanying illustration.

The motor supplied is a heavy duty one-quarter horsepower and is supplied for all commercial currents. When desired a food chopper can be furnished with the equipment.

NEW PORTABLE EGG TIMER

Hospital executives will be interested in a new type egg timer which can be used readily either with electricity, coal or gas. The egg cooker is a heavily spun nickelplated copper container. Two-egg baskets are fur-



nished, each basket holding from three to five eggs according to their size. The machine can be regulated at half minute intervals so that eggs can be boiled from one-half minute to six minutes, at which time the basket of eggs is automatically lifted from the boiling water.

The illustration shows the egg timer mounted on a special electric hot plate. This hot plate is made of heavy cast iron, nickel-plated, and it consumes a maximum of 1,500 watts. The top is twelve and a half inches square, the hot plate proper being eight and a half inches in diameter. A three-heat switch controls the current and insures economy by limiting the current consumption to the cooking requirements.

One feature which makes this device particularly suited to the diet kitchen is the fact that the hot plate can be used independently for many of the minor cooking operations necessary in a ward kitchen.

OUTSIDE-INSIDE BED PROVIDES OPEN AIR SLEEPING FACILITIES

ONE of the vexing problems in designing hospitals and sanatoriums is the provision of ample fresh air sleeping facilities for patients. While this problem is encountered in general hospitals, it is particularly pertinent in tuberculosis sanatoriums.

In the ordinary type of general hospital, fresh air facilities are obtained by means of solariums, open porches and roofs. The common practice is to wheel the patient in a bed or reclining chair to the space provided and then return him to his sleeping quarters for the night. It is readily apparent that such a method not only increases the necessary size of the hospital but adds a considerable amount of work for the attendants. Furthermore, it necessitates frequent exposure of nurses and attendants who must pass from the heated interior to the porch or roof. In hospitals devoted to the care of the tuberculous provision is frequently made in the design of the building for the patient to sleep virtually in the outdoor atmosphere or the same

result is accomplished through the use of small cottages or tents.

A unique invention which has been recently perfected apparently goes far towards solving the question of open air sleeping facilities. It consists of a compartment unit which may be utilized separately or as a series of several unit compartments. It may be adapted for use in any building as a unit to be added at a window opening, or to form an open air ward on the flat roof. It can also be utilized in new buildings as an integral part on any floor.

The invention consists of a novel arrangement by which the patient can enjoy all of the facilities of a comfortable, warm interior, yet by a single operation in which the bed is not moved, be placed in the open air. A window extending the length of the bed closes over it at an angle of perhaps 45 degrees. When it is desired that the patient be outdoors an attendant or possibly the patient himself, raises the window, pushes its lower part in and



Fig. 1.

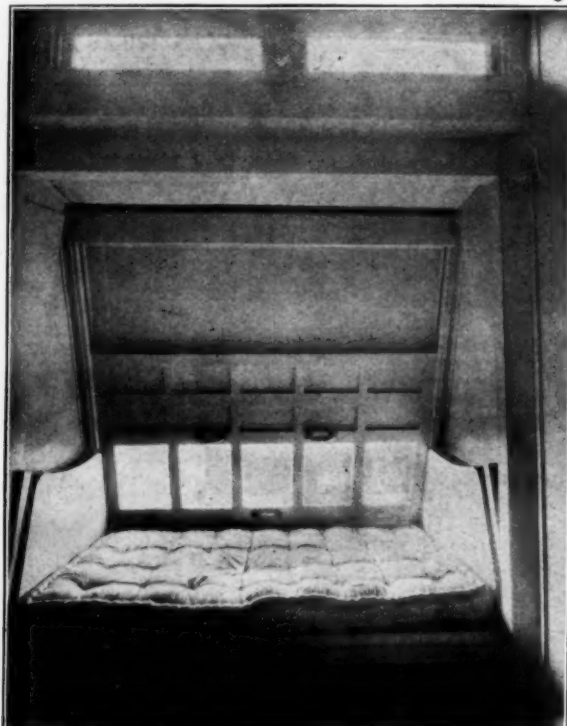


Fig. 2.



Fig. 3.

across the bed, and closes it again. This leaves the window on the inside of the bed and the patient in the open. So when the window is closed on the outside, the bed and the room occupied by it are a part of the interior, and when the window is swung across and closed on the inside

ment unit apparently on the flat roof of a building with the window entirely closed on the outside. Fig. 2 shows the same compartment from the inside with the window completely closed. In Fig. 3 the compartment is shown with the lower part of the window raised prelim-

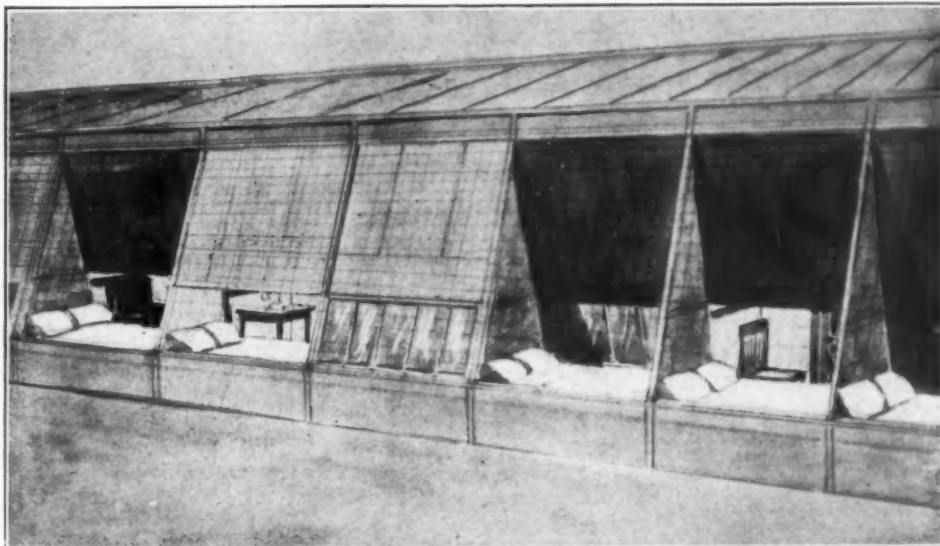


Fig. 4.

the space occupied by the bed is practically outdoors. The window being closed between the bed and the interior of the building keeps the cold air out and maintains the temperature of the interior at a comfortable point so that the attendant or nurse is not subjected to exposure.

inary to transforming the bed into outside sleeping quarters. With the window thus raised the patient is protected in case of storm, but still obtains ample fresh air. From this position the attendant or patient is able to swing the window across the bed upon the track provided

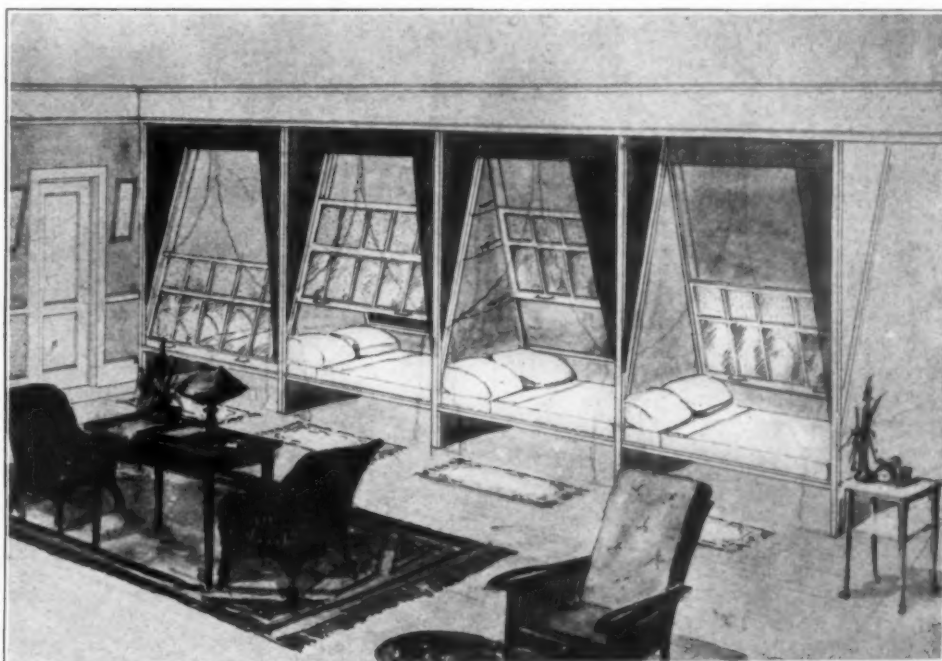


Fig. 5.

In established hospitals this new device will permit the flat roofs of the buildings to be utilized as open air wards at a minimum of expense and without materially increasing the strain on the walls.

Perhaps a better idea of the device can be obtained by referring to the illustrations. Fig. 1 shows a compart-

for this purpose, exposing the bed and the occupant to the open air as shown in Fig. 4.

A series of compartment units arranged as open air ward is shown in the architect's drawing in Fig. 4. This illustration shows the varying arrangement of the window by which some sleeping compartments are completely

opened and others merely have the windows raised.

A section of the interior arrangement of the open air roof ward, showing particularly the interiors of the compartments is illustrated by the drawing in Fig. 5. Here again it is possible to see the several arrangements. In

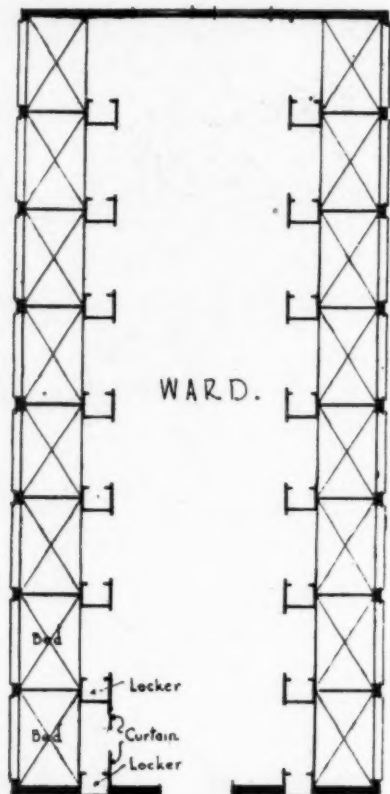
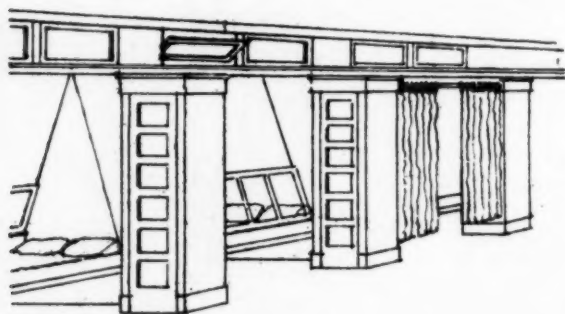


Fig. 7.

the first compartment to the right, the window is closed completely on the outside; in the second compartment it has been raised ready to swing across the bed on the course marked by the arrow. In the third compartment the bed is virtually outdoors as the window has been swung across and partially closed. As is indicated in the drawing, the central space in such a ward can be utilized as a lounging or reading room for convalescents.



SHOWING BED INSIDE. SHOWING BED OUTSIDE. SHOWING CURTAIN.

Fig. 8.

These rough drawings give an idea of the possibilities of this sectional system of sleeping compartments. Modifications can readily be made and private dressing rooms, lockers and other features added to the arrangement.

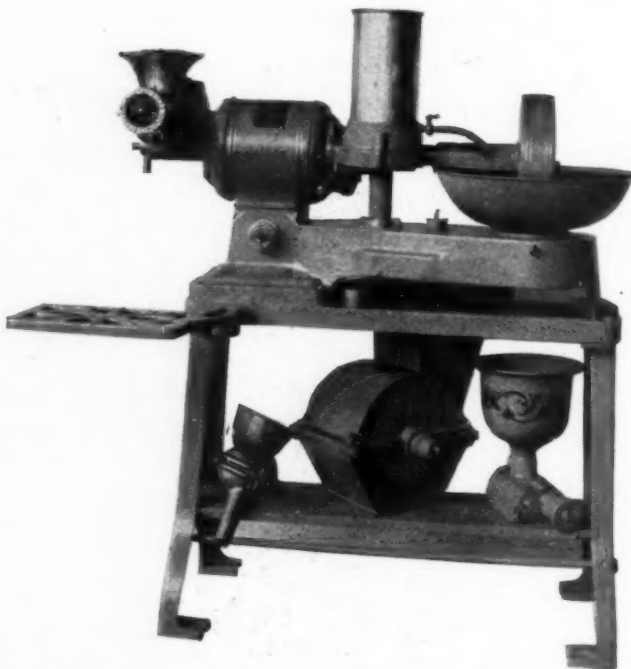
Fig. 7 shows a simple floor plan of an open air ward with the bed units along each side. It is noted that in this plan locker space is provided and privacy is afforded by means of curtains across the opening. A further detailed drawing in Fig. 8 shows such an arrangement with lockers indicated and with the curtains drawn in front of one of the compartments.

Not only does it seem that this invention would afford a ready means of open air facilities, but that it would accomplish this through the use of a minimum amount of space and with full protection for nurses and attendants. The further fact that a simple ward of this kind can be economically erected on the roof of any institution will undoubtedly arouse the interest of hospital executives and architects.

A "JACK-OF-ALL-TRADES" FOR THE KITCHEN

A new kitchen machine with such a wide range of usefulness that it has been dubbed a "jack-of-all-trades" in the kitchen has recently been introduced to eastern hospitals. The new machine is entirely automatic and because of its wide adaptability will save considerable labor in small and medium-sized hospital kitchens.

This machine, called The Kitchen Mechanic by its maker, besides chopping meats and vegetables, furnishes an automatic mayonnaise mixer, a meat grinder, horse radish grater, peanut butter mixer, coffee grinder, and



a cheese and a cocoanut grater. In addition an attachment is supplied for grinding knives and cleavers; a pulley is likewise furnished for driving a separate ice cream freezer and bread crumber.

A feature claimed for the machine is that in chopping meats and vegetables it actually cuts and does not crush or mash, a difficulty found in many equipments.

This machine is substantially constructed, easily kept clean and economical of operation. It is furnished either for table use or with floor stand as shown, and occupies a space about thirty-nine by seventeen inches. The chopping bowl is fifteen inches in diameter.

MEETINGS, CONVENTIONS AND CONFERENCES

HOSPITAL EXECUTIVES OF THE NEW ENGLAND STATES UNITE TO FORM ASSOCIATION

ORGANIZATION of the New England Hospital Association was affected and application made for recognition as a geographical section of the American Hospital Association at a meeting of hospital executives held on December 7 at the Boston Medical Library. Representatives were present from each New England state when Dr. John M. Peters of the Rhode Island Hospital at Providence called the meeting to order.

Following the acceptance of a constitution and by-laws, officers of the new association were elected. They are: Dr. Joseph B. Howland, Peter Bent Brigham Hospital, Boston, president; Miss Rachael G. Metcalfe, R.N., Central Maine General Hospital, Lewiston, vice-president; Dr. Nathaniel W. Faxon, Massachusetts General Hospital, Boston, treasurer; Dr. John M. Peters, Rhode Island Hospital, Providence, trustee for four years; Dr. Louis A. Sexton, Hartford Hospital, Hartford, Conn., trustee for three years; Miss Ida F. Shepard, R.N., Mary Hitchcock Memorial Hospital, Hanover, N. H., trustee for two years; and Dr. Thomas S. Brown, Mary Fletcher Hospital, Burlington, Vt., trustee for one year.

Dr. A. R. Warner, executive secretary of the American Hospital Association, addressed the meeting explaining the plan of geographical sections as developed by the American Hospital Association. He proposed that the formation of a New England Hospital Association be considered in the light of the following principles:

1. That there be strictly common basic viewpoints and interests in the emphasized activities and no real conflicts in any activity of the organization.
2. That the organization fill a definite need not within the legitimate scope of any other organization and promptly develop positive usefulness.
3. That the plan shall in advance convince all of the groups it aims to unite that the organization will properly represent and promote their views and their interests.

Because of the greater number of hospitals in Massachusetts, together with the centrally located situation as regards the rest of New England, Dr. Warner felt that the Massachusetts representation would quickly overshadow, out-vote and control the activities of such a New England Hospital Association, to such an extent as "eventually to leave a New England Hospital Association in name and a Massachusetts Association in fact." He submitted the following plan:

"Each New England state should form a state hospital association to become a separate association and as soon

as fully organized become a separate geographical section of the American Hospital Association.

"There should be formed a correlating and central body known perhaps as the New England Hospital council formed by two or three delegates from each state association to correlate and promote the organized hospital activities of all the New England states; also to represent and to transact such business for each and all of the associations as shall be delegated to it. The council should elect its own chairman.

"A joint annual meeting of the Associations of all the New England states should be held somewhere in New England under the auspices of one of the state associations. The officers of this association should prepare the program and preside over the general sessions. This meeting would be known as the annual convention of the New England Hospital Associations.

"The time and place of each annual convention and the selection of the association to assume responsibility therefore should be determined by the council. Any expense of the meeting could be assessed by the council on the associations in proportion to their membership.

"At each annual convention there should be separate meetings of each association under its own officers to discuss satisfactorily the specific problems of each state as well as joint sessions for the discussion of topics of common interest and bearing.

"This plan of organization would not only avoid all the difficulties of the other but give additional advantages. The principal object of the association would be assured a greater success. More people would be attracted to the annual convention especially from states other than Massachusetts."

The plan submitted by Dr. Warner was thoroughly discussed by the members present.

Legislation in Connecticut

Dr. Sexton, former president of the Connecticut State Hospital Association, gave a short review of the reasons for the formation of the Connecticut Hospital Association, and some of its accomplishments in the legislative field. The association was able to bring about the passage of a bill making it necessary for a patient leaving a hospital to satisfactorily adjust his hospital account before leaving, he declared. This bill was drawn upon the same principle as the legislation previously passed to prevent the jumping of hotel bills. The second bill passed as the

result of Connecticut association's activities, was one making workmen's compensation insurance companies pay the full cost of board of patients. Previously the insurance companies had been charged at the regular rate charged to charity patients, which rate was usually lower than the actual cost of caring for such patients.

Representatives from the various states were called upon to express their opinion regarding the advantages of the formation of a New England Hospital Association as compared with the advantages of the formation of separate state associations. Speakers from Maine, New Hampshire and Rhode Island stated that in their opinion it was doubtful if any state organization could be formed in their states.

Mr. George T. Chaffee of Vermont announced that the Vermont hospitals had already completed the formation of a state association which he thought they would not wish to give up. As to the reception of the New England Hospital Association in Vermont, he was unable to say.

Dr. Washburn summed up the discussion in favor of the original plan for organization by the following points:

"1. State lines in New England are not as sharp as in other sections of the country and while the plan proposed by Dr. Warner seems better suited to all other sections it is quite possible that the original plan will be successful in New England.

"2. The New England Hospital Association can be

formed and made active at once and Dr. Warner's plan would take time to accomplish.

"3. If the New England Hospital Association does not prove an unqualified success, or if for any other reason it seems desirable, the plan proposed by Dr. Warner can at any later time be put into operation through the existence of the New England Hospital Association more easily than now."

It was finally voted that the body was in favor of forming a New England Hospital Association and that it be affiliated with the American Hospital Association as a geographical section. The chair was then authorized to appoint a committee to bring in recommendations for a constitution and by-laws and a nominating committee. The meeting was then adjourned.

Luncheon was served on the first floor of the medical library, and a very pleasant hour was spent in renewing associations with old acquaintances and making new ones.

In the afternoon meeting the constitution and by-laws submitted were read and accepted.

By motion unanimously adopted it was made a policy of the New England Hospital Association to keep its qualifications for membership at all times identical with the qualifications for personal membership in the American Hospital Association.

Application has been formally made to the American Hospital Association for admission as a geographical section.

MICHIGAN HOSPITAL ASSOCIATION HOLDS FIFTH CONVENTION AT FLINT

HOSPITAL accounting, staff organization, food service, diagnostic clinics and the relation of the small hospital to the health problems of the community were some of the principal topics discussed at the fifth meeting of the Michigan Hospital Association held at Durant Hotel at Flint on January 18 and 19.

After a brief word of welcome from the representative of the mayor of Flint, Dr. Stewart Hamilton, acting president of the association, introduced Dr. Henry Vaughan, health commissioner of Detroit, who spoke on "The Relation of the Small Hospital to the Health Problems of the Community." Dr. Vaughan outlined the growth of the organized public health movement in this country and England from the middle of the last century, and indicated that today the education of the doctor has in many instances outstripped the facilities provided for him in order to reach the highest degree of efficiency in the practice of his profession. Dr. Vaughan felt that hospitals should provide the qualified physicians of their community with adequate x-ray and laboratory facilities, that there should be a minimum of interference in the relationship of the patient and his family physician, and that the hospital should be a place where a physician would have access to facilities that would keep him in the forefront of his profession. He felt that small hospitals properly equipped could make a distinct contribution toward lowering the morbidity and death rate of the community and prolonging life.

The remainder of Wednesday afternoon's session was devoted to a discussion of hospital food problems, under the chairmanship of Miss Rena Eckman, household director of the University Hospital at Ann Arbor. The first of the four papers on this general subject was read by Miss Ella M. Eck, dietitian, Blodgett Memorial Hos-

pital, Grand Rapids, on "Food Service in Hospitals." Miss Eck pointed out that the first essential in giving good food service in a hospital is of course good food, not necessarily expensive, but wholesome. The sense of taste is not the only one to be considered; sight is of quite as much importance, since a patient will sometimes refuse to touch his tray if it does not look attractive. Secondary to the food but still of great importance are the trays, linen, silver and china, and Miss Eck declared that a definite plan of setting trays with an appointed place for each article adds greatly to their appearance and decreases the time spent in serving.

Technique in Handling Food

Discussing the question of where dishes should be washed, Miss Eck argued for a central room provided for this purpose; in her judgment, it eliminates duplication of effort, saves time, requires fewer employees and lessens the noise on the various floors.

Whether it is desirable to do part of the cooking in small diet kitchens depends, in Miss Eck's judgment, on the kind of food that is being served, the distance of diet kitchens from the central kitchen, and their location in relation to the wards and patients' rooms.

"In working for professional service," said Miss Eckman, "we are emphasizing more and more individual service, considering not only the diet prescribed for the particular ailment of the patient but also his preferences in the selection of the food and its method of preparation. Patients on restricted diets may be made much happier and more responsive to treatment if a little more time and care are spent in the preparation of their diet. This is the particular job of the dietitian, and to handle it successfully she must have the cooperation of doctors

and nurses and must use all the tact and ingenuity at her command."

Dr. Babcock urged hospitals to get away from the routine method of serving food, a method which necessitates handling it once and sometimes twice too often. By serving food from portable steam tables it is possible to omit the handling of the food in the pantry and at the stationary steam tables, a practice which, in his opinion, is at best often mussy and results in the loss of heat.

Dr. Albert D. Wickett, assistant professor of internal medicine, University of Michigan, read a very scholarly paper on "The Medical Point of View" with reference to dietetics and dietotherapy, in which he dwelt in some detail upon the dietary treatment of diabetes, nephritis, obesity, tuberculosis and typhoid fever. He contended that dietotherapy, to be successfully used, must be based upon fundamental laws and facts. Miss Dorothy M. Stewart, special dietitian, University Hospital, Ann Arbor, described the system of diets for the treatment of diabetics used at that institution.

The concluding paper of this session was devoted to a discussion of the place of nutrition work in a hospital dispensary. Its author, Miss Esther M. Funnell, social service dietitian at Harper Hospital, Detroit, said that in the present-day vernacular "nutrition" has come to be used synonymously with the word "health," especially as applied to the child. She quoted Dr. Ira S. Wile as saying: "We now speak of nutrition as an index of health. Good nutrition is the equivalent of good health and malnutrition is the equivalent of ill health." Miss Funnell contended that every hospital dispensary should include in its plan for development ample supervision for the establishment of nutrition work. This work, however, should not be confined to the organization and conducting of nutrition classes for children, she declared, for in the dispensary, as in the hospital itself, there will not infrequently come cases of diabetics, nephritis and obesity which will require dietetic supervision. The person appointed to this work must therefore be at once a nutrition worker and a dietitian; her training for this undertaking should consist of at least a four-year course in an accredited school of home economics; she should also have a thorough knowledge of food values, cookery and dietotherapy, as well as some training in social service work. Miss Funnell felt that many dispensary patients can be cared for in groups and pointed out that at the present time there are a number of dispensaries featuring diabetic clinics. Massachusetts Hospital in Boston, for example, has a diabetic clinic, attended by 200 patients, and the department reports splendid success, she asserted. At the dispensary of the Lakeside Hospital in Cleveland, moreover, there is a similar clinic, composed largely of discharged hospital cases, who report regularly to the diabetic clinic for supervision.

The organization of a dietetic department in a dispensary is not without its difficulties. The dietitian will often encounter indifference on the part of the physician who has worked for years without such a department, and in many cases she will have to begin in a small way and justify not only the work itself but its growth. Miss Funnell pointed out that it is of the utmost importance to a dietitian doing dispensary work to have a demonstration room where she can give actual instruction in food preparation. The equipment of this room need not be expensive, as it should contain only such things as are essential to the preparation of food. The use of elaborate utensils in demonstrations will not help to meet the needs of patients when the modest equipment of their own homes is considered.

Before this session adjourned, Miss Rena Eckman made a brief statement regarding the results of a three days' study of plate waste in the dining rooms of the physicians, nurses and lay workers of a well known institution. Accurate figures were kept of the amount of food sent into the dining rooms, the amount reclaimed and the amount that was actually wasted. Here are some of the detailed figures:

	Percent		Percent
Bread	16	Pot roast	35.4
Cereal	4.5	Irish stew	11.2
Potatoes	34.7	Roast veal	14.4
Butter	7.4	Cold roast beef	31.2
Vegetables	6	Meat pie	11.1
Lamb	12.8		

In a study of the food waste in the wards it was found that this was even greater than in the dining rooms.

Wednesday evening's session was devoted to the discussion of the Sheppard-Towner bill by Mr. Fred M. Johnson of the Community Union of Detroit, in which he traced the genesis of the bill and its history in Congress, and indicated his interpretation of its provisions, particularly as they apply to the state of Michigan. He was followed by Dr. Olin, state commissioner of health, who spoke informally of the work of his department and the work recently assigned it of supervising hospitals connected with state penal and correctional institutions.

One of the most helpful sessions of the meeting was held on Thursday morning, at which time the problems of hospital accounting, staff organization in hospitals and diagnostic clinics were ably discussed.

Mr. Springer Discusses Accounting

After calling attention to the report of hospital forms and records submitted to the last meeting of the American Hospital Association at West Baden, Mr. Durand W. Springer, superintendent of the Homeopathic Hospital, Ann Arbor, analyzed several basic accounting principles. Among the points he emphasized were the following:

1. Before revising its bookkeeping system or inaugurating a new one, a hospital should first determine what information it will need. Bookkeeping is a method by which information is kept for future use, and unless the system is definitely planned it will be a patchwork.
2. Minimum requirements as to information.
 - (a) Total number of hospital days.
 - (b) Total number of out-patient visits.
 - (c) Amount earned, whether paid for or not.
 - (d) Cash receipts on earnings.
 - (e) Net cash receipts other than on earnings.
 - (f) Value of other than cash receipts.
 - (g) Cash expenditures.
 - (h) Value of expenditures covered by other than cash expenditures.
 - (i) Average cost per capita per diem.
 - (j) Average cost per visit.
3. Preparation of forms for recording information.
 - (a) Use standard size blanks.
 - (b) Avoid duplication of work by using carbon copies.
 - (c) Do not try to develop all possible facts but make them available if needed.
 - (d) Use loose leaf books or cards.
 - (e) Place data on sheets or cards in such a way that they can be shuffled for every possible purpose.
 - (f) Use specially ruled sheets or cards.
4. Minimum accounting record books.
 - (a) Minute record.
 - (b) Cash receipts and disbursements (special columns).
 - (c) Cash payments and disbursements (special columns).
 - (d) Purchase register.
 - (e) Series of inventory sheets for cost record.
 - (f) Patients' register, card record and patients' census record.
 - (g) Earnings register.
 - (h) General ledger.
 - (i) Patients' ledger.
 - (j) Journal and financial statement.
5. Fundamental accounting principles.
 - (a) Entirely separate capital and operating accounts.
 - (b) To income from operation add only net results of capital account.
 - (c) Properly allocate both as to revenue and expense all inter-related items, so that correct comparisons can be established and statements of revenue and expenditure be made rather than statements of receipts and disbursements.
6. Capital accounts.
 - (a) Corporation income.
 1. Endowments for capital expenditure (gifts).
 2. Rents.
 3. Sales of property.
 4. Miscellaneous, such as donations figured at cash value, subsidies, etc.

- (b) Corporation expenses.
 - 1. Salaries of officials and employees engaged in corporation work.
 - 2. Legal expenses.
 - 3. Expenses incurred in raising funds.
 - 4. Interest on loans.
 - 5. Miscellaneous.
- 7. Minimum operating accounts.
 - (a) Income.
 - 1. Board of patients and special nurses.
 - 2. Operating room, delivery room and anesthetics.
 - 3. Laboratory, x-ray and clinical.
 - 4. Pharmacy, medical and surgical supplies, dressings and optical goods.
 - 5. Miscellaneous, such as fees collected from doctors.
 [To this should be added (a) receipts from out-patient visitors and (b) net corporation receipts. The result will be the total institutional income.]
 - (b) Expenses.
 - 1. General.
 - (a) Administrative.
 - (b) Housekeeping, including laundry.
 - (c) Maintenance and repair.
 - 2. Professional.
 - (a) Medical services.
 - (b) Nursing services.
 - (c) Attendings and orderlies.
 - (d) Pharmacy, medical and surgical supplies, dressings and optical goods.
 - (e) Laboratory, x-ray and clinical.
 - (f) Social service.
 - (g) Dietetics.
 [To this should be added the expenses of the out-patient department. This will give the total institutional expenses.]

Following Mr. Springer's discussion of hospital accounting, Father Michael P. Bourke, St. Joseph's Sanatorium, Ann Arbor, read a stimulating paper on staff organization in small hospitals, which THE MODERN HOSPITAL will publish at an early date.

Limit Size of Diagnostic Clinics

Speaking on the subject of diagnostic clinics, Dr. Plinn F. Morse, director of the diagnostic clinic, Harper Hospital, Detroit, said that medicine as it should be practiced today is exceedingly complex; since it is so complex, it is exceedingly expensive, and the physician of moderate means cannot provide himself with the necessary diagnostic and therapeutic facilities. Dr. Morse felt that state medicine, with the panel system, as it now prevails in England, is the result of a lack of well-rounded practice at reasonable prices. The medical profession has failed in delivering economical medical treatment to the rank and file. As a result we have the organization of health clinics at community centers, the practice of medicine on the part of university schools of medicine, the holding of obstetrical and heart clinics by local board of health. To assist in alleviating this situation, the diagnostic clinic of Harper Hospital was started. The clinic is activated by a belief that the family practitioner is needed for the well being and happiness of families and that no system which pretends to displace the family physician, who should be a friend as well as a technical adviser, will be a success; that the family physician cannot be what he should be because he has not adequate facilities, and that the cost of delivering good medical service is more than most people can pay for getting this service to them. Since some ninety per cent of our population cannot pay for the type of service which the development of modern medicine makes necessary, they are in most instances obliged to do without it. The diagnostic clinic at Harper Hospital accepts patients only from physicians; it does not short-circuit the public to the hospital. The clinic returns patients with findings. Absolutely no treatment is given in the clinic; this must be given by the referring physician. Dr. Morse felt that the diagnostic clinic should not be large, and Harper Hospital plans to take care of between forty and fifty patients a month.

Hospital Privileges to Osteopaths

On Thursday afternoon a round table discussion was conducted by Dr. W. L. Babcock. One of the questions discussed was whether osteopaths should be allowed to

send patients to a private room in the hospital and give treatment there. The general feeling was that they should not be granted this privilege. Some of the delegates thought it all right to allow osteopaths to refer patients to the hospital, but that once admitted, the patients should pass out of their control.

In response to the question "Should relatives of patients be admitted to the operating room?" Dr. Munger said that he had recently put this question to heads of ten or twelve leading hospitals of the country, seventy-five per cent of whom replied that they did not allow visitors on the operating floor. A few hospitals refer requests of this character to the operating surgeon. Dr. Babcock said that relatives were not admitted to the operating rooms of his hospital except in certain instances where children were to be operated upon. He observed that if relatives and friends are admitted to the operating floor it is hard to keep them away from the operating suite.

In discussing the question of the employment of nurse anesthetists to the exclusion of interns, Dr. Babcock said that only nurse anesthetists are used at his institution, and that interns are allowed to anesthetize only so far as is necessary for their training. It was pointed out that the superintendents of small hospitals, in an effort to employ nurse anesthetists, meet with objections from the family physician, who is anxious to secure the fee for administering the anesthetic.

Retirement of Surgeons

In discussing the question of the retirement age of surgeons, Dr. Smith, superintendent of Michael Reese Hospital, Chicago, who happened to be in town, said that his institution has three classes of physicians, namely, attending, associate and adjunct, and that the attending men are retired to the position of senior attending at sixty years of age, or after twelve years of continuous service, irrespective of their age. As senior attendings they have the privilege of sending their patients to the private rooms of the hospital and to teach on the wards. At seventy years of age they become consulting surgeons, after which they merely have the privilege of sending their own patients to the private rooms of the hospital. Dr. Hamilton said that it is the practice of Harper Hospital to retire its surgeons at the age of sixty-three years, irrespective of the class to which they belong.

In answer to the question as to whether the time has now arrived to reduce room rates and other hospital charges, it was said that Grace Hospital, Detroit, had on the first of October, 1921, reduced its charges for x-ray and laboratory service twenty-five per cent. It was generally felt that rates should come down as costs come down, but that some hospitals would be justified in maintaining their rates in the face of lowering costs, because when costs went up during the war they did not increase their rates with the same rapidity.

MISSOURI TO ORGANIZE

The Missouri Hospital Association will meet at St. Louis on February 10 to form a permanent organization, according to an announcement sent out by Dr. Rush E. Castelow, Christian Church Hospital, Kansas City, secretary of the preliminary organization. The day will not be spent at a formal program, but hospital workers will meet together to become acquainted, visit hospitals of the city and hold a business session. Dr. A. R. Warner, executive secretary of the American Hospital Association, will be present. Dr. Louis H. Burlingham of the Barnes & Children's Hospital, St. Louis, is temporary president.

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR., Ph.D., Executive Secretary Committee on Dispensary Development, United Hospital Fund of New York, and Chief, Service Bureau on Dispensaries and Community Relations of Hospitals, American Hospital Association, 15 W. 43rd Street, New York
and by ALEC N. THOMSON, M.D., Director of Medical Activities, American Social Hygiene Association, 105 W. 40th Street, New York

THE RELATION BETWEEN THE OUT-PATIENT DEPARTMENT AND WARDS

TENTATIVE RECOMMENDATIONS PREPARED AND SUBMITTED FOR GENERAL CRITICISM BY DR. GERTRUDE E. STURGES, ASSOCIATED OUT-PATIENT CLINICS, NEW YORK CITY

UNTIL recently the out-patient department was considered a very unimportant branch of any hospital. Most hospital trustees and administrators and many physicians still fail to appreciate the importance and magnitude of out-patient service. "The dispensary has too often been treated as a Cinderella in the hospital household; neither sufficient funds nor sufficient thought has been given to its organization and work."

If the number of patients treated be a criterion of importance (and to the mind of the trustee, numbers have always been of importance), the dispensary should receive the highest consideration, as this department in large institutions treats from five to ten times as many patients as the hospital itself. The dispensary, with its much broader contact with the community, is giving a grade of service inferior to that given in the hospital and is constantly presenting the institution in a bad light to a large proportion of its clientele.

It cannot be the kind of patient treated in the out-patient department that accounts for the difference in attitude. The patients are often the same individuals, cared for during one phase of illness in the dispensary and during another phase in the hospital wards. Neither can it be the type of sickness that makes the distinction, because nearly all types of sickness are cared for in both departments. But the more serious and advanced stages of disease are treated in the hospital. This seems to be the explanation of its prestige. Accordingly we conclude that the failure to grant the same consideration to the out-patient department as to the hospital proper is that the patients cared for in the wards are more acutely ill than those cared for in the dispensary.

Ambulatory Cases Slighted

Sir James MacKenzie has pictured disease as consisting of four stages: First, the predisposing stage; second, the early stage; third, the advanced stage; fourth, the final stage. He says further that "medicine has advanced so far that for the study of disease after the patient has died we find institutions magnificently equipped, presided over by men of great experience and training; for patients suffering from the advanced stages of disease, we have great hospitals with staffs of skilled physicians,

surgeons and specialists. If we seek to learn the facilities offered for the detection and cure of disease in the stage when it has not damaged the tissues, we discover that there is little consideration given to this aspect of the matter."

When we consider that "the chief aim towards which all endeavors should be bent, in medicine, is the prevention and cure of disease," shall we continue to provide excellent service for operative conditions and advanced illness and fail to secure at least as adequate service for these same conditions in their preventive and curative stages? And if it has been worth while to provide high grade hospital care during the more serious phases of disease, is it not worth while, then, to follow the treatment to completion by the best type of dispensary service?

Do not chronic diseases, such as heart trouble and nephritis, produce hardship and death as well as the more spectacular and dramatic pneumonia and appendicitis? Why should a better type of care be provided for the latter conditions? In other words, is there any real reason for giving scientific and humane care to patients when they are bed-ridden and much less careful treatment while they are still ambulatory?

It is keenly felt by thinking physicians and teachers that the patients' care should be of a similarly high grade through both out-patient department and wards; moreover, that the treatment provided, as well as the opportunity to study the case, should be continuous and consistent.

No Continuity of Medical Care

Not only has there been failure to provide high grade dispensary service, but the lack of continuity of treatment between out-patient department and wards has been and still is not only a flagrant source of waste of medical service and educational opportunity but a serious deterrent to the most rapid and satisfactory cure of patients.

Because there has been little liaison between dispensary and hospital staffs, and even less transfer of information regarding the previous care of patients in other departments, the medical care of patients transferred between wards and out-patient department has been anything but consistent and continuous.

Patients sent from the out-patient department to the

1. E. H. Lewinski-Corwin, Ph.D.: The Dispensary Situation in New York City, Medical Record, January 31, 1920.

2. Sir James MacKenzie, "The Future of Medicine," page 1.

wards are often treated by a different physician, one who knows nothing of what the dispensary treatment has been. Waste of time and duplication of effort result. The patient has gained confidence in the physician who has cared for him previously, but now must become used to another personality; he has been cross-questioned and examined several times before, but all this must now be repeated. The physician who cared for the patient in the dispensary and who has become interested in the case has made a tentative diagnosis and referred the patient to the hospital. He is eager to know the subsequent history of the case, to see "the dispensary diagnosis confirmed or refuted, it may be by operation or at the autopsy table."¹

There is a tangible loss of money in duplication of laboratory service, but there is a much greater intangible loss in lack of continuous and effective medical care and in the lack of enthusiasm if not the actual dissatisfaction of the out-patient staff. This lack of cooperation between wards and dispensary is usually more wasteful in chronic than in acute conditions, because for chronic cases the care in the previous department has usually been of longer duration.

Why Service Attracts Physicians

Dr. Alexander Lambert says, "I think you will agree with me, that the necessity and value to the patient and to the doctor of a close cooperation between the wards and the dispensary, varies in its necessity in different services or, more particularly, varies in the value obtained in certain such instances as in cardiac cases, in tuberculosis, in children's diseases, where the varying developments need supervision. In short, in cases which the chronicity of disease or the continual supervision of existence requires close attention, it is of greater necessity and value than in the ordinary varying acute ailments of general practice or surgery."

Why do physicians seek service in out-patient departments, and why do many continue to serve there, year in and year out, under uncomfortable physical conditions, poor administration, with inferior laboratory, clerical, nursing, and social services, inadequate equipment, and almost complete lack of appreciation of their service?

What they seek in out-patient service is educational opportunity, more often in a specialty, and professional advancement. There are some altruistic souls who are eager to serve humanity and therefore glad to give their time and energy with no hope of reward, and we know there are some materially minded and unscrupulous individuals who use their out-patient service for "bunco-steering" (referring dispensary patients to private offices), but the large majority of physicians work in the dispensary for what they can learn and in order to get a foot on the ladder up.

Making It More Attractive

Physicians' work in out-patient departments is in a large majority of institutions entirely gratuitous. How are the hospital trustees to reward them and attract them to prompt and faithful service, if not in the kind of compensation which they appreciate most? The children's medical service at Bellevue Hospital recognizes this principle as fundamental: "The out-patient department shall be organized so as to be of the greatest possible interest to the men working in it." The maximum opportunity

for learning for the out-patient staff requires complete liaison between the hospital wards and the out-patient department; the attendance of the senior hospital staff in the out-patient department for supervision and instruction; the opportunity for dispensary physicians to follow cases into the hospital, to study and report on series of cases, to attend hospital rounds and case conferences; and a unification of the hospital and dispensary record systems.

In order to get a complete picture the physician "should watch the progress of the patients from the time they first apply to the dispensary until they are either 'relieved by art or released by death.' The student cannot get a proper perspective of disease if his acquaintance ceases when the patient leaves the out-patient department for the ward or if it be first made in the operative theater or afterwards."²

In order to be able to do scientific and instructive medical work in the dispensary, a more reasonable ratio of patients to physician, than is now the custom, is essential. It is obviously impossible for one physician to give anything like adequate service to thirty or forty patients in two hours, and even more hopeless for him to attempt a scientific work-up of cases under such pressure. Limitation of patients or increase of staff, or both, will be necessary to make possible a reasonable service to patients and a reasonable opportunity to study their cases to physicians. But limitation of patients is a difficult question of administration. An increase in dispensary staff is also difficult for most institutions to achieve. Physicians are not seeking the ordinary dispensary service at the present time, chiefly because of the lack of opportunity for learning and professional advancement and also because of the counter-attraction of paid positions in industrial medicine, insurance work, etc. As was recently remarked, in the course of a discussion in the New York Academy of Medicine on this very subject, "It is no longer the clinical assistant that is on probation; it is the hospital."³

Reward for Dispensary Service

Has the young physician a right to expect professional advancement in return for dispensary service? It would seem reasonable for him to expect that association with the senior men of his service would yield certain prestige if not actual reference of practice; that through study of results of cases he should prepare papers for presentation at staff meetings and publication in professional journals; that he should be given preference, all other factors being equal, when vacancies in the hospital staff occur; that he should have the privilege of caring for his private patients in the hospital; that membership in a dispensary staff should yield him a certain amount of professional prestige and not be a stigma of failure.

To promote both educational and professional opportunity for the out-patient medical staff, to make it possible for them to render the highest type of service to patients, and to effectuate the service they do render, there are certain requirements in out-patient administration, non-medical service, and equipment, that are essential; such as prompt and accurate laboratory diagnosis, a follow-up system, social, nursing and clerical service, adequate space and equipment. All of the above involve more or less financial outlay, but the returns to the institution in superior service, increased efficiency and esprit de corps, have been found to justify the expense

1. Ralph B. Seem, M.D., Relation of the Dispensary to the Hospital, *THE MODERN HOSPITAL*, January, 1921.

2. Charles Hendee Smith, M.D., Recent Developments in Out-Patient Work, Transactions of Section on Diseases of Children of the A. M. A., 1919.

3. Essentials of Surgical Teaching, G. Grey Turner, M.D., Hon. Assistant Surgeon, Royal Victoria Infirmary, Newcastle-on-Tyne. *Edinburgh Medical Journal*, August, 1918.

4. The Evolution of a Children's Clinic, Frank Howard Richardson, M.D. *Medical Record*, July 24, 1920.

in those institutions where these factors of adequate out-patient service have been provided.

Improvement of Liaison

The improvement of liaison between hospital wards and dispensary, on the other hand, involves little financial expenditure except for transfer of records, but does require the hearty cooperation of the medical staff of the hospital. It is felt, moreover, that no more potent force for raising dispensary standards exists than just such unification of the in and out-patient departments as is outlined below.

As very little literature and research on this subject is available, it was thought wise for the Associated Out-Patient Clinics of New York City, a voluntary organization of representatives of the chief out-patient departments and dispensaries of that city, primarily interested in raising dispensary standards, to undertake a study of the existing procedures for relating the hospital clinics and wards and to formulate standards for such relationship.

Accordingly, a study was made of the existing procedure in nineteen large representative institutions, both special and general. This material was largely gathered by conference with hospital superintendents and in some instances with dispensary executives. Great variety of organization and procedure was found among these institutions, although in most there had been some attempt at liaison of medical staff, usually by having the junior members of the hospital staff act as clinic chiefs in the out-patient department. In most institutions, because of entire independence of staffs or rotation of service, there was no possibility of having patients seen by the same physician in the wards who had cared for them in the dispensary. The service of hospital attendings and their assistants in the out-patient department was not customary; dispensary physicians were given few if any privileges in the hospital; promotion of out-patient to hospital staff, although the rule in a few institutions, was far from being customary; the transfer of records between dispensary and wards, although ideal in one institution and satisfactory in several others, was meager or non-existent in the majority of cases.

A tendency to improve ward and out-patient department liaison was manifest; several institutions had reorganized recently or were undergoing a process of reorganization. No doubt the recommendations of the Public Health Committee of the New York Academy of Medicine, in its survey of dispensaries, has stimulated improvement along this line. Where well unified services exist, enthusiasm among the staff was manifest and appointments as clinical assistants were eagerly sought.

A study was also made of the method of relating wards and clinics in each of the different services of one large and highly organized institution. Here a great or even greater variety of procedure was found than in the nineteen institutions studied. One service was found to be almost perfectly unified, others to be moderately well linked up, but still others to be without any real staff liaison or record transfer; for although in all services one member of the hospital staff acted as chief of clinic, in some cases this clinic chief was on rotated service (six months in hospital and six months in dispensary, etc.), making his potential service as liaison officer to promote continuity of medical care, practically nil.

The physicians interviewed in this study were almost without exception fully aware of the wastefulness of the present system.

Having ascertained the various existing methods of re-

lationship, an attempt was made to secure from competent sources opinions as to what the ideal linking-up of hospital wards and out-patient department should be. Accordingly seventy-five representative physicians active in dispensary service were interviewed. In some instances these men were hospital attendings or directors of service, but in most cases they were of the grade of clinic chief. These physicians were invariably found to be keenly interested in this subject and many of them had valuable constructive suggestions to offer.

With the material so gathered as a basis, tentative recommendations for the relationship of hospital and out-patient department to promote continuous and consistent medical care of patients have been drawn up, as follows. These recommendations have not as yet been formally adopted by the Associated Out-Patient Clinics and before adopting and promulgating them, the Association invites detailed criticism from both professional and administrative points of view. Your comments and your criticisms will be welcomed by Michael M. Davis, Jr., executive secretary, Associated Out-Patient Clinics, 15 West 43rd Street, New York City.

Tentative Recommendations

Unified Organization.

Hospital and out-patient staffs should constitute one organization.

All members of the staff should serve in the out-patient department. The service of the seniors¹ should be at least one day a week.

Definite duties in the hospital should be assigned the entire clinical staff. In the case of juniors² these may consist in following certain types of cases through both dispensary and wards, in making reports on series of cases, etc.

The entire staff should have hospital private room privileges, whenever possible.

Each hospital should publish the names of the entire staff, at least once a year, in the annual report or other official publication.

Probation.

Official appointments to staff, annual or permanent, should ordinarily be given only after a period of probationary service. It should be required that no physician should be permitted to work in a clinic unless holding either an official appointment on the staff or a temporary appointment as an unofficial or volunteer assistant. Appointment as unofficial or volunteer assistant should require at least the registration of the name and professional pedigree of the physician, and the length of time which any such unofficial appointment may be held should not exceed one year. At the expiration of that period, the privilege of working in the clinic should cease unless an official appointment to the staff is made.

Promotion.

Other things being equal, efficient out-patient service in a hospital should be reason for preference in promotion within the staff of that institution.

Continuous Service.

The director or responsible head of each service should be continuously in charge.

Wherever possible service in the wards and out-patient departments should be continuous and not rotating. A large enough staff should be appointed to make such

1. By "seniors," attendings and associate or assistant attendings are meant.
2. By "juniors," clinic chiefs and clinic assistants are meant.

service possible without demanding too much time of any one physician.

Medical Care of Patients.

The principle of continuity of care of the patient should be maintained. The patient should always be referred to the same division or section of service in the wards which cared for him in the out-patient department and, wherever possible, to the personal attention of the physician who cared for him in the out-patient department. The same principle should govern reference of patients from the ward to the out-patient department.

Staff Conferences and Study of Results.

Staff conferences for discussion of both ward and dispensary cases should be held monthly, at which the attendance of all members of the staff, including clinical assistants on probation, should be required.

Weekly rounds for all the staff of each service should be conducted.

The out-patient department should be so organized as to be capable of being used for careful study and diagnosis of obscure cases. For this purpose the organization of a diagnostic division is important.

Studies should be made from time to time of results of series of cases which have been treated in both out-patient department and ward. A cross-index of case histories by diseases is desirable in order to facilitate such studies.

Records.

A unified system of medical histories for hospital and out-patient department, with a single record room for both departments, should be the ideal to work towards.

Until such unification is brought about, a system of summarizing dispensary and hospital records, and referring summaries when patients are transferred between departments, should be adopted. Such summaries should contain notes on history, physical examination, treatment and laboratory examination.

Admission and Follow-Up of Patients.

So far as possible all patients should be admitted to the hospital ward through the dispensary.

Follow-up and after-care of all ward patients should be conducted through the out-patient department.

Interns.

The out-patient department provides opportunities for the medical education of interns that should be utilized. When interns are used in the out-patient department they should work under the instruction and supervision of staff physicians. Definite instruction should be given the intern by these senior physicians from the clinical material available in the out-patient department.

The service of the intern in the out-patient department should, when feasible, be simultaneous with service on the same specialty in the hospital.

Pupil Nurses.

When pupil nurses are used in the out-patient department the educational responsibility of the institution to the nurse should be considered in outlining their duties.

Definite instructions should be given the nurses from the out-patient clinical material.

Social Service.

Work done for a patient by the social service department should be continuous, whether performed in connection with the hospital or the out-patient department, and wherever possible the same worker should have charge of the case in both departments.

CORNELL UNIVERSITY OPENS PAY CLINIC

On November 1 Cornell University Medical College altered the plan of operation of its teaching dispensary which has been carried on for many years in the college building at 27th Street and First Avenue, New York City, and began to operate a pay clinic. A circular of information issued by the college announcing the clinic states that:

"The clinic is designed for those who cannot afford the fees charged in private offices, but who require expensive medical service, particularly of specialists; who do not wish to accept charity in an ordinary dispensary; who wish courteous attention, privacy and individual care. Admission will be limited according to this policy."

The public health committee of the Academy of Medicine of New York, after an extensive study of dispensaries in New York City completed about two years ago, called attention to the need of the middle class and recommended pay clinics for those wage earners and others of limited means who cannot afford to pay more than very limited sums for medical care. The committee on dispensary development of the United Hospital Fund of New York was organized as a result of the study made by the public health committee and is cooperating with the faculty of Cornell Medical College in this undertaking. An appropriation has been made by the committee to assist in meeting the deficit which it is expected will be incurred by the clinic during its initial month, and the committee is also furnishing advisory service of its staff in connection with the technical problems of organization and administration and the study of results. Pay clinics were initiated by the Boston Dispensary in 1913 and have since been established in a number of places such as in Cleveland and Chicago and in New York City in the Brooklyn Hospital, the Booth Memorial Hospital, the Neurological Institute and the Babies' Hospital Dispensary. The Cornell clinic, however, is a more complete and ambitious undertaking than any previously existing pay clinic. A fee of \$1 a visit is charged patients, with medicines, supplies, x-rays, laboratory tests, etc., charged extra at cost. Patients unable to pay these fees are only taken in exceptional cases, as for teaching purposes. There are many nearby clinics of the free type, notably Bellevue Hospital and University and Bellevue Medical College, both of which are within one block, so that the type of patient previously attending the free Cornell dispensary can be referred to these clinics without hardship.

The clinic is open daily except Saturdays, Sundays and holidays from 1:30 to 4 p. m., and on two evenings a week from 5 to 7:30 p. m. Some special clinics are held in the morning.

May Become Self-Supporting

Clinics in the following specialties are held: general medicine, surgery, gynecology, urology, neurology, psychiatry, dermatology, syphilology, otology, rhinology, laryngology, orthopedic surgery, ophthalmology, gastroenterology, endocrinology, protein sensitization and dentistry. A department of massage and electro-therapeutics is also provided. There is ample laboratory service both for clinical work and for research and a well-equipped x-ray department for diagnosis and treatment. The clinic is chiefly for adults but children are accepted in the specialties and a pediatric consultant is available for dealing with the general conditions of children who are under care in one of the special clinics.

The staff of the clinic includes ninety-four physicians. The heads of the departments of the Cornell medical

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faculty are available for consultation in the clinic at specified periods. The chiefs of clinics and their assistants are all recompensed for their clinic work on a salary basis. The teaching of medical students goes on in the pay clinic which takes the place of the former charity clinic conducted by the college. It is hoped that the income from the clinic will after a period be sufficient to meet the running expenses other than those which are properly chargeable to education and research, which it is not expected to cover.

A diagnostic clinic particularly designed for patients referred by private physicians has also been organized. A fee of \$10 is charged for the examination in this clinic. This fee includes complete physical examination, routine urinalysis, Wassermann examination and hemoglobin estimation, reference to special clinics, and limited x-ray or other laboratory examinations. A report of the findings of this clinic, with recommendations for treatment, is prepared for the physician who refers the case. This service seems to have been appreciated by local physicians, for already it has been considerably utilized.

Health Examinations a Feature

For individuals who are not sick but who wish to have an examination to discover any existing defects or disease and to secure advice regarding personal hygiene a "health examination" is offered for which a fee of \$2.50 is charged.

Every effort is made to limit the patients admitted to those who fall within groups for which the clinic is properly intended. A carefully devised plan of social and economic classification of patients has been adopted by the faculty through which consideration is given to the financial circumstances of the patient, the size and responsibilities of the family, and the probable cost of the medical treatment that is needed, and inquiry is made of each new patient to determine suitability. Patients unable to pay are ordinarily referred to one of the local dispensaries of the ordinary type. Considerable numbers of applicants, on the other hand, who are able to pay the fees of private physicians for the service required are referred to physicians in their vicinity. By vote of the faculty no such patients can be referred to or accepted by any member of the Cornell clinic staff.

Clinic Has Long Waiting List

One of the features of the clinic is the limitation of the number of patients admitted to each department so that the physician receives no more patients than can be dealt with in a thoroughly satisfactory manner in the time available. As a result of this policy, in the face of an overwhelming response on the part of the public to the opening of the pay clinic, hundreds of applicants have had to be turned away. Before the opening day there were approximately 350 applications on file. On no day up to the time of the preparation of this article (December 20) has the clinic been able to accept all of the applicants for treatment and there are on file over 900 applications from persons for whom appointments cannot yet be made. Patients are seen on return visits entirely by appointment and so far as possible new patients are also given appointments, as a measure of economizing time for both patient and clinic. During the first month of the clinic there were 6,488 visits of which about 3,700 were new patients. During the first half of December the number of visits was 4,621, an increase of some fifty per cent over the rate of attendance during the preceding month. Since, however, all the initial patients during the first weeks were new patients the physicians could not give

proper care to nearly as great a number as will be practicable within the same time when the patients coming for return visits bear their usual ratio to the new patients.

Every department is provided with a clinic executive and with adequate nursing and clerical assistance. There is a central record system, all the records for each patient from different departments being assembled in one folder and filed in one place, sent thence when needed by ushers to the proper department.

HOSPITALIZATION OF THE SYPHILITIC

A plea for hospitalization of the syphilitic patient is made by Dr. Herman Goodman of New York in a recent issue of the Boston Medical and Surgical Journal. Dr. Goodman cites statistics which show that there are no facilities in New York City for the hospital care of the non-criminal syphilitic although that city sends each year approximately 1,000 cases to the state hospitals for insane, diagnosed paresis. Some provision has been made recently, Dr. Goodman states, for ambulatory treatment of syphilis but no hospital facilities have been added.

Conditions have materially changed since Fournier, father of modern syphilology, pointed out the defects of the hospital treatment of the disease and advocated the institution of dispensaries, Dr. Goodman declares in his article. The advances of the twentieth century, especially in specific arsenic chemotherapy, make it desirable to hope for a wider use of the hospital bed in the treatment of early syphilis.

Although it is admitted that facilities set apart for the syphilitic in civilian hospitals in general are inadequate, the syphilitic does occupy the hospital bed, even in those hospitals which do not admit the syphilitic *per se*, Dr. Goodman points out. The Presbyterian Hospital in New York reports that twenty-five per cent of the patients in medical wards have positive Wassermann tests practically diagnostic of syphilis. Other hospitals have similar records. Is it too far fetched, Dr. Goodman puts the question, to conclude that general hospitals refuse cases of active syphilis in the primary and secondary stages but welcome them for aneurism, tabes and other late symptoms of the disease?

A hospital that admits the active syphilitic, according to Dr. Goodman, is embracing the most gigantic opportunity in preventing and treating this most prevalent and chronic disease. The hospital bed, in selected cases, may make all the difference in the world between success and failure in the attack on the diseased individual, his family, associates and the whole community. The hospital that has admitted a case which subsequently shows a positive Wassermann or other evidence of syphilitic infection should treat the case for syphilis concomitantly with the other treatment if feasible, or prior to discharge for the primary condition causing admission. It will only be a short time, he predicts, before the spinal fluid examination will also be a routine measure for every bed patient.

Early eradication is going to result in a tremendous diminution of the prevalence of the infection and a drop in the death rate from chronic diseases dependent on syphilis in later life, to say nothing of the saving in the syphilitic miscarriages and early death. The temporary hospitalization of the chancre today means innumerable hospital days saved in the insane asylum, the home for chronic and incurable diseases and the home for feeble-minded children tomorrow.

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—the stable and non-irritating preparation of the Suprarenal active principle. The e. e. n. and t. men find it the premier product of the kind.

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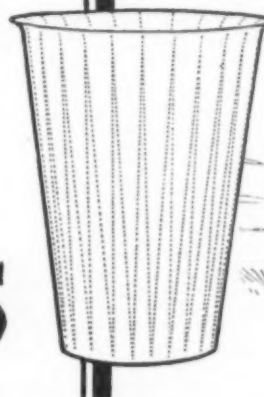
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LILY CUPS

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OCCUPATIONAL THERAPY AND REHABILITATION

Conducted by HERBERT J. HALL, M.D., President, American Occupational Therapy Association,
Devereux Mansion, Marblehead, Mass., and MRS. CARL HENRY DAVIS,
Advisor in Occupational Therapy, 825 Lake Drive, Milwaukee, Wis.
Co-Editors: LORING T. SWAIM, M.D., 372 Marlboro St., Boston Mass., and
MISS MARY E. P. LOWNEY, Room 272, State House, Boston, Mass.

HOW ONE SMALL CITY IS SOLVING ITS OWN REHABILITATION PROBLEMS

BY KATHRYN ROOT, COMMUNITY WORKSHOP, STAMFORD, CONN.

STAMFORD, Conn., is a city with well organized philanthropies, one excellent hospital, good doctors, and finely trained nurses, is open-minded toward new agencies with which to achieve its ideals of physical and social betterment, but a year ago it had never given thought to occupational therapy.

To see curative handwork well carried on and hear expert workers plan for its development in sanitariums, general and special hospitals and private practice is to be aroused to enthusiasm for it.

One Stamford woman being thus converted resolved to introduce it in her own community. Her resources were some teaching experience, skill in several handicrafts, a wide acquaintance with local professional and philanthropic men and women, the experience of a long and severe illness, and enough money to enable her to give her time and pay for the necessary equipment. Best of all was her familiarity with the methods in use at Devereux Mansion, Marblehead, Mass.

A light, quiet room, overlooking a stream and some fine trees, was rented and equipment for weaving and toy making installed. Loans of tables, shelves and stools from the Red Cross and of a loom and warping beam

from a friend reduced the cost of furnishings to \$150, this including a second loom. Rent and supplies for ten months brought the total to approximately \$700. Half as much has already been taken in for teaching and sales, and materials on hand will, when made up, probably pay for the rest. Orders now unfilled amount to more than \$100. There has been no advertising, but the venture has been freely and informally talked about.

To this room have come without asking a few pupils in weaving, one serious case of nervous illness, one obscure case combining nerves and an injured spine, a blind woman, a convalescent needing physical exercise, an overzealous spinster without quite enough to do, a gratifying number of buyers of toys and woven articles and many interested visitors.

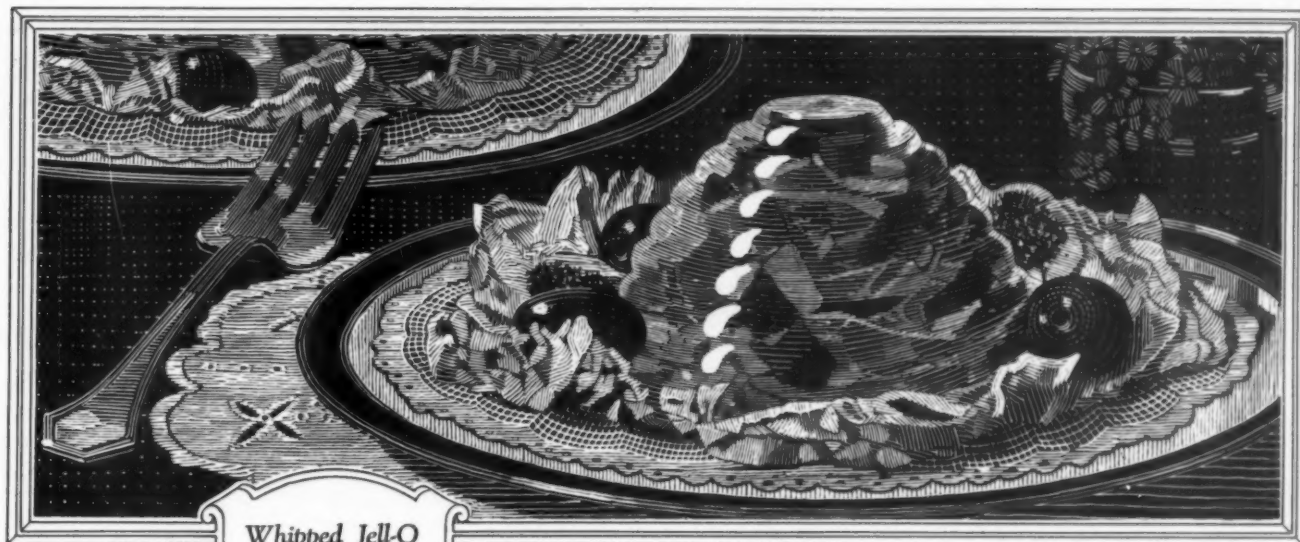
From the shop work has gone out to the hospital and to shut-ins. In the former, from one to ten patients have been daily busy at some kind of handwork—knitting wheel caps, making wooden toys, baskets, and weaving on one tiny loom. The patients represent one case, a rheumatic ankle where toy painting gave satisfactory relief to nerves tense with pain, worry and loneliness; two cases of broken arms, one in which the doctor actually asked



One corner of the Community Workshop in Stamford, Conn., showing a girl at work at one of the looms. The shop is well lighted and cheerful looking.



Another view of the Stamford Community Workshop, showing wooden toys and other products of patients' handicraft. Through the windows one glimpses the attractive surroundings of the shop.



Whipped Jell-O

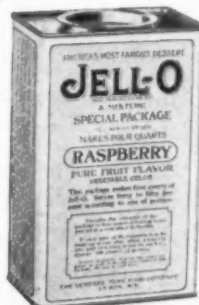
While Jell-O with fruit as illustrated is very popular, an increasing number of users are taking advantage of the fact that it can be whipped as readily as cream. Send for a free booklet.

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that his patient be given sawing and sandpapering to exercise a stiffened elbow; one case of incurable heart disease where a raffia basket passed the hours of anxious impatience to return to the family; a mastoid case, a small boy who was so diverted by painting blue elephants that he forgot his daily tempest of tears when his mother left him; and many more, not forgetting the nervous woman who refused to cooperate in any treatment given and who left the hospital still unpersuaded to try the occupations offered or the woman who now needs to exercise her legs but cannot have a foot power loom because the ward has no place for it.

The hospital has no space to give so only the most meager apparatus can be taken to the building. An addition is to be erected in a few months and the directors have been asked to include a shop in the plans. Finances permitting, they will do it. Funds to equip it and keep it running will have to be raised outside, and the Hospital Aid Society has consented to act as a channel through which they may be administered.

Visiting the sick in their homes is limited by the time and strength of one teacher. The Visiting Nurse Association is interested, other charities will cooperate, and the clergy and parish visitors have waiting lists of those to whom aids might go. A plan is being formulated to index and file all reported cases until such time as they can be visited by a special worker.

Twenty-five patients in less than a year is not a bad beginning. Money and workers will come. There is no opposition. In thousands of towns and villages, this same opportunity is open to volunteers, even now, before there are enough fully trained occupational aides to meet the need.

Of course, such work should not be undertaken by people who have only enthusiasm to guide them, but it seems a pity to wait for years, perhaps, for the blessings of prescribed work when a little enterprise and cooperation will bring about results such as are here recorded.

LEISURE AND IDLENESS

We who are interested in occupational therapy must not fall into the error of supposing that it is impossible for a man to be happy and progressive unless he is fully occupied, unless he is constantly busy. There is too much rushing to and fro in this world, too little leisure, too little time for quiet and contemplation. We are interested in supplying occupation to the handicapped because we know that enforced idleness, idleness that is helpless and hopeless, is a deadly thing. We know that a reasonable amount of worth while work is essential if there is to be any comfort in leisure. Leisure and idleness are two absolutely different states. Most healthy, well balanced men

would become desperate in a short time with nothing whatever to do. Moreover, it is well known that the pursuit of pleasure is after a while an unsatisfying occupation. Real productive work seems to be one of the essentials of normal life; this alone makes possible the real enjoyment of leisure.

If a normal man cannot be idle without becoming mentally and physically unfit, how much more important is it that people who are slowly convalescent or chronically ill should have the opportunity for wholesome work! It seems inconceivable that we should have so long missed this vital point in our care of invalids.

But now has come the new profession of occupational therapy which studies the industrial needs of the hand-

capped from the point of view of happiness and progressive for the purpose of aiding in recovery from long and tedious illness. It is a wonderful field, one to engage the best efforts, the most careful study of medical men and occupational teachers. We are just beginning to see the possibilities, human and economic, just beginning to realize that here is a new and tremendously worth while opportunity for service.—EDITOR

SEND IN YOUR CASE REPORTS

The occupational therapy department is anxious to get from occupational teachers reports of specific cases in which prescribed work is believed to have been of real rehabilitative service. It would like, also, instances of unsuccessful attempts to interest patients or to develop their initiative. Records of failure are just as valuable, perhaps more so, than reports of success.

Please send these case records to Dr. Herbert J. Hall or Mrs. Carl Henry Davis, first having obtained the permission of the hospital superintendent for publication.

Some such form as this might be used:

Name of hospital
 Name of patient (using initials if patient objects to publicity)
 Age Sex Previous occupation
 Nature of disability
 Degree of helplessness
 Kind of work employed as remedy for helplessness
 Length of work periods possible at beginning of treatment
 Length of work periods possible at end of treatment
 Clinical notes covering general observation of patient, his improvement in morale, physical strength, etc. Remember that record of failure is as important as that of success. Sometimes in these clinical notes, a statement of the patient's own words, some statement of opinion by the doctor or the nurse will be valuable.

TO GET NECROPSIES

Five cardinal principles for hospitals to follow in their efforts to obtain necropsies are enumerated by Dr. L. G. Richards, house surgeon of St. Luke's hospital in New York City, in a recent communication to *The Journal of the American Medical Association*. Dr. Richards bases his arguments on his observa-

tion of what one 400-bed institution has accomplished in obtaining a higher percentage of postmortem examinations. His principles follows:

1. Establish what might be termed an "entente cordiale" with that member of the family who, in event of death, is legally authorized to give permission. This has frequently resulted in securing permission before death in hopelessly incurable cases. Persons who at first seem to be bitterly opposed to a postmortem examination will themselves request one when the matter is presented properly.
2. Ask for permission in every case of death. It is only by repeated necropsies that pathology can make progress.
3. Request permission immediately after death. A close relative, when most keenly affected and grieved by death of one near and dear, is at that moment more willing to consent than at any other time. Later consideration or consequent discussion with others almost invariably results in a refusal.
4. Broach the matter of a necropsy only to the next of kin or the one legally able to give permission. Effort to solicit the aid of an intermediary is usually a mistake and often the cause of failure.
5. Make every effort to obtain the permission before an undertaker has seen the relatives.

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CAGED BIRDS

By ALICE L. LEWIS, TOY SHOP OF THE INDUSTRIAL DEPARTMENT, SCHOOL FOR CRIPPLED CHILDREN, PITTSFIELD, MASS.

YES, literally, they are birds with clipped wings, these children fluttering to escape and a little stunned by the consciousness that some big cage has closed around them. The hospital with its terrors has gone and here is home—but how different!

How awkward to wear a leather jacket! How clumsy to carry an iron brace! How suffocating to live under the dome of a white plaster case! This eternal reaching out for crutches, this enforced cautiousness at rough

stinctively, a child loves to construct. He is found with stones, pieces of wood and paper, trying to make something—absorbed and happy. No matter how crude and bungling the result, he is attempting to express himself. The work that is creative and full of joy is right for the child. In toy-making, sources of inspiration are found. Even grown-ups confess that toys are fascinating and interesting. They are a bond between old and young.

In the airy, well lighted shops at the school, where the shelves are lined with vivid colors, and where the humming of machinery and the scent of sawed wood fill the air, the boys awaken to ideals and the vision of new things. Real joy comes into their lives. The manufacture of toys encourages originality, cultivates taste and teaches self-reliance. It can be summed up in one word—resourcefulness.

The curative value of the work is recognized. It is beneficial to be busy about any task that gives varied physical exercise, is purposeful and productive. Work at the school is more than occupational; it is educational. The use of tools, the knowledge of wood, and the finishing processes on any article become a part of the child's knowledge. It is a fact that these Berkshire crippled children, coming from families of more or less education, generally less, become unusually intelligent as a result of this training. The industrial work may be, like music, dull or fascinating, according to the way it is taught. The spirit of the shop has been full of suggestion this past year. The manufacture of tables and chairs and doll houses has opened the way to discussion of homes



Some robin redbreast and his mate will find cozy quarters in this cottage made by a proud Berkshire cripple.

places, how trying such practices can become! To stay at home or to hang around the street corners while others frolic is no fun. The weary, hopeless feeling that it is all of no use is apt to come over these children.

All these and many more are mental and physical obstacles that confront crippled children who leave the hospitals. To care for and educate them, the Berkshire School for Crippled Children has been founded at Pittsfield, Mass., by a well known orthopedic surgeon of Boston. At this school they are given a home and education. As far as possible, their birthright of joy and happiness, which fate or circumstance tried to cut off, is restored to them. The children gradually find their balance and start true along the road of useful and happy expression.

One part of the education which seems to possess many desirable qualities is the industrial department, featuring toy-making, an industry adopted as the first step in the training of crippled boys for their life work. Toys have belonged to children from time immemorial. In-



Whole colonies of birds may settle in the numerous houses constructed by boys at the Berkshire School.

What Do You Expect In

SURGEONS' GOWNS

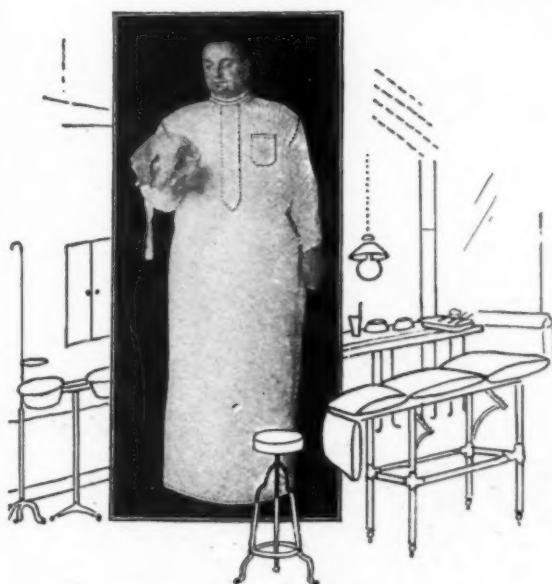
Nurses' Uniforms— Patients' Bed Gowns?

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As a feature we offer our new Patients' Bed Gown, made of Indian Head or Fruit of the Loom, at \$13.50 per dozen

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and their furnishings. Bird houses lead easily to a study of our feathered friends. Sawed out animal toys call for a study of the appearance and habits of the creatures they represent. A small boy arrives to unsurpassed heights when he finishes his first aeroplane.



In fashioning wooden animal toys, the boys take keen delight.

Toy-making leads naturally into advanced wood and metal working, and thence to trades and vocations which are competently taught at the industrial shops.

Thus, in spite of bruised wings, these birds are encouraged to fly. In spite of lame and halting bodies, the boys' minds are taught to stretch and grow. They forget their limitations in active expression.

EMPHASIZES PRACTICAL SIDE OF REHABILITATION

The seventh annual report of the Massachusetts Industrial Accident Board contains the following from a chapter on the rehabilitation work accomplished by the Vocational Training Division during the first fourteen months of its existence.

"The work of vocational training has been approached by the Board with the idea in mind that injured employees must be brought to the highest stage of physical efficiency possible in view of their handicaps, and then placed back in employment at the job most suitable for them.

"The problem is an intensely practical one, requiring the fullest cooperation on the part of the incapacitated employee and insurer, with all efforts made by the board and other agencies aiming to reduce the period of disablement and fit the employee for permanent and gainful employment.

"The most important single factor in the return of the injured employee to productive employment is the matter of adequate medical and surgical treatment, and to this end insurers are encouraged to furnish injured employees the very best treatment and after care. The furnishing of the most practical artificial appliances is an important feature in helping to overcome physical disabilities.

"Insurance companies cooperated very fully, and in many instances they have continued compensation during the training period in order to encourage and strengthen the injured employee in the habit of work and in the acquirement of special skill to make up for the effect of the injury."

The report comments upon the survey made of employment opportunities, and the general attitude of employers toward the work of re-education and replacing injured workmen. "The objections raised

were due largely to a misunderstanding of the industrial problem of vocational replacement, and is being cleared up by actual demonstrations of the fact that the re-educated and retrained injured man can perform the work for which he has been re-educated and retrained efficiently."

The points of difference in work with industrial accident cases and that which ex-service men are mentioned. "The government in dealing with the disabled soldier is dealing with a young man, usually between the ages of twenty-one and thirty-one, taken for the army under the selected draft system, and so selected because he was practically 100 per cent perfect, physically. The average employee injured in industry is thirty-eight years of age, and is not ordinarily at the time of the injury anywhere near 100 per cent perfect, is, in a large number of cases, unacquainted with the English language, and has long prior to his injury passed the formative period of his life. The United States Government has approached the problem regardless of the expense involved. Expense is an important factor in dealing with injured employees under the Workmen's Compensation Act.

Of the 234 cases dealt with specifically, eighty-seven were arm and hand disabilities; seventy-seven lower limb disabilities; forty were disabilities of the trunk, including back injuries; eight were eye cases; and twenty-two were miscellaneous handicaps. Of the total, 115 were given training and placed. In addition to these specific cases, advice and assistance were given to a large number.

"NEW YORK DOES CARE"



The above poster, with its appealing caption, was a factor of inestimable value in the recent financial campaign of the United Hospital Fund of New York, described in the January issue of THE MODERN HOSPITAL.

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QUERIES AND ANSWERS

TO MARK SURGEONS' GLOVES

To the Editor of THE MODERN HOSPITAL:

Can you suggest any satisfactory method of marking surgeons' rubber gloves? Each surgeon in our hospital buys his own gloves and we must find some way of identifying them. I have used a special kind of indelible ink but it was not entirely satisfactory. SUPERINTENDENT.

In marking surgeons' rubber gloves, an excellent method is to run a stitch of thread around the upper rounded corner of the gloves. By adopting, let us say, two colors of thread, black and white; three or four positions on the glove, i.e., front, back and either side; and one, two or three stitches, you can provide almost an indefinite number of combinations. You could readily devise a little code and post it where the gloves are used, as, for example:

- 1 white stitch, back, Surgeon A.
- 2 white stitches, back, Surgeon B.
- 3 white stitches, back, Surgeon C.
- 1 white stitch, front, Surgeon D, etc.

RADIATORS BEHIND STEEL WALLS

To the Editor of THE MODERN HOSPITAL:

Can you give me any information regarding the heating of operating theaters by means of radiators placed behind enameled steel walls? LONDON ARCHITECT.

We do not know of the use of enameled steel for that purpose but it may be that your inquiry refers to a glass lined room which Schmidt, Garden & Martin, Chicago architects, designed about ten years ago for an addition to Alexian Brothers Hospital in that city.

The addition contains an operating room, laboratories and several surgical dressing rooms in which a thick white glass—we believe it is called Carrara—was used extensively. Steam pipe coils are in a space about two feet wide between the outer brick walls and the glass. The glass is about one inch in thickness with polished faces, ground on the edges and with polished rounded edges. The glass of walls and ceilings is supported on rigid frames of steel angles and tees, which are spaced adjacent to the joints in the glass to facilitate proper fastening of the latter. Wall, floor and ceiling angles have polished glass coves of about one and one-half inches radius.

There are steel and plate glass casement windows in the brick walls as well as in the frame work supporting the white glass lining and steel doors, giving access to the pipe space from the jambs, heads and stools of the windows; the stools and heads are perforated.

The glass was fitted as tightly as possible on the frame work and pointed with white lead and Litharge pointing material, but there has been no breakage from expansion. The rooms are very comfortably heated with apparently no unusual expense in installation or operation.

The result is an absolutely smooth and washable surface with the absence of radiators.

It is probably that a similar result can be obtained by the use of enameled steel plates. There need be no fear of breakage by expansion if the plates are fastened to a steel frame work similar to the one described, for then the expansion of plates and support would be alike. However, enameled plates have the disadvantage of the enamel splitting from the plate if it is given a sharp knock.

The heavy glass may cost a little more, but it is certainly very durable and does not have objectionable wavy surface of enameled plates to distort every reflection.

COST OF BUILDING

To the Editor of THE MODERN HOSPITAL:

Our hospital has 160 beds for patients. We desire suggestions for a building which will house kitchens, diet kitchens, serving rooms, storage rooms, refrigerating plant, sleeping quarters for female employees, dining rooms with a seating capacity for twenty officers, for sixty nurses, for fifteen male employees and for twenty-five female employees. What would you consider the approximate cost of such a building? SUPERINTENDENT.

Your question as to the approximate cost of a building such as you described was referred to Schmidt, Garden & Martin, Chicago architects, who assume that the building would be four stories and basement, of fireproof construction and of durable materials throughout.

The basement, according to their plan, would be devoted to storerooms and have refrigerating machinery. The first floor would have the kitchen, diet kitchen, bakery, and necessary toilets. The second floor would have the nurses' and officers' dining room; and if it is impossible to place the employees' dining room on the first floor, it should be on the second floor, too. The third and fourth floors would be used for help, housed largely in rooms large enough for two beds, with a few single bedrooms and all necessary auxiliaries, such as toilets, living rooms, etc. The capacity would be thirty persons.

Such a building would have a content of about 150,000 cubic feet and should be built for forty or fifty cents a cubic foot, or from \$64,000 to \$80,000.

MORGUES IN HOSPITALS

To the Editor of THE MODERN HOSPITAL:

How large must hospitals be before they maintain their own morgue? SUPERINTENDENT.

There are a number of factors involved in this matter, as for instance, the psychological reaction of the relatives of patients who have died in the small hospitals; whether the hospital is located in the city or rural districts; and whether it carries on post mortem examinations to any extent. Every hospital of twenty-five beds should have its own morgue; or some room with suitable refrigeration.

ROYAL

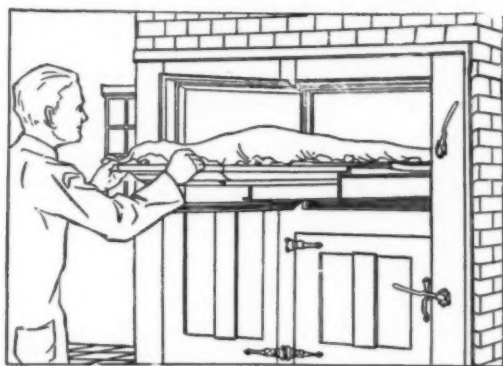
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HINTS TO HOSPITAL SUPERINTENDENTS

MEDICAL REPORTS TO TRUSTEES

It is important that hospital boards of trustees should receive a report of the medical work each month as well as an account of the money earned and spent. There should be two reports to the board each month, a medical report and a financial report. From these can be gained a true perspective of what the hospital is doing for the money spent, and a better balance sheet can be established. To this end the following is a suggested form of medical report which may be of use to hospitals.

1. Volume of business done:
 - a. Patients admitted,
 - b. Patients discharged.
2. Physical assets:
 - a. Patients discharged well,
 - b. Patients discharged improved.
3. Physical liabilities:
 - a. Patients discharged unimproved,
 - b. Patients dead.
 - c. Infections and complications.
4. Consultations held.
5. Reports of results of investigations made by medical records department.
6. Recommendations made by staff to superintendent.
7. Action taken by superintendent as a result of these recommendations.

In such a report as this it is quite understood that the various points mentioned have already been reported in detail to the staff and considered by them.

ECONOMY BY SUBCONSCIOUS SUGGESTION

"The aggregate of the waste from thoughtlessness in the use of small items and carelessness in the handling of all articles is astounding, states Bulletin No. 37 of the American Hospital Association. This carelessness and this thoughtlessness and the resulting extravagance come directly from the effect upon the average mind of the large visible stocks of supplies and the routine ease in securing replacements. It is normal psychology.

"It cannot be effectively combated by rules or reprisals. It is rarely an offense; the person is merely reacting to subconscious suggestion.

"A proper storeroom and requisition system will materially reduce the amount of supplies visible at the point of use. This always pays. But even then moderate visible supplies of a nature readily permitting waste are necessary in hospitals and the replacement of damaged equipment must always be promptly made. The remedy must combat the result of these factors.

"Two methods have proven of value. It is always worth while to study the use of all supplies as practiced in your regular hospital under particular persons.

"The dispensing of supplies should then be done in the way that least often leaves an unused remnant in the hands of someone who must think and act in order not to waste it.

"The second method of proven worth is to drill into the minds of all, the aggregate value of the little wastes and the costs of the replacements, together with suggestions as to better uses for these sums of money.

COMFORT FOR NURSES

Do your nurses receive their guests in a grim and forbidding room where the chairs each seem to have a personal grudge against you? And do the pictures consist of former superintendents of the hospital who look as if they had been gathered to their fathers (and rightly) about the time of the Boston Tea Party? And are there some glass flowers or a stuffed bird in a case? If so, stop and consider. Or perhaps the nurses' reception room resembles a ball room of the time of Queen Anne except that the chairs are tired of life and look as if they might deprive you of yours if you were foolish enough to entrust it to them. Then, too, stop and consider. Would it not be economy in the end to change the room with a small outlay of money into a homelike restful place? Economy in mental outgo of the nurses, economy in that you would get more nurses. It is true that today when other professions are becoming so attractive the profession of nursing must mind its p's and q's if it is to hope to have the necessary number of young women entering its ranks.

FOR CHECKING SMALL EQUIPMENT

One of the most trying of hospital problems is the keeping of small equipment in place. The provision for a weekly inventory does not always meet the situation. One school of nursing has devised a plan that has apparently been most successful in checking the loss of small equipment and in keeping equipment up to standard in the matter of repair.

This hospital has each ward equipped with a dressing room in which are kept articles needed in treatments. A senior student has the responsibility of this room on each ward. A form is provided showing the standard list of articles and it is checked every evening by the student and left at the training school office before she goes to dinner. She gets the form again in the morning as she goes on duty. The form is ruled for a month's use. The system works well when constantly supervised and this is a matter of small effort. Properly carried out, the chart registers all shortage and breakage, and hypodermics, scissors and other small equipment are much more apt to be found in their place and in good repair.

Facts Would Not Justify Such a Decision



A PATIENT developed a rash after an injection of diphtheria antitoxin. But have you stopped using antitoxin in diphtheria? Hardly, because you know—you *realize*—that that patient is, perhaps one in a hundred; and to cut antitoxin from your list of therapeutic agents because of an occasional anaphylaxis would be a decision without justification.

Is there any more logic—is there any more justification in taking the joy out of your patient's breakfast, as you do when you pronounce "Cut out coffee!" without the history, the etiology, the symptomatology, the diagnosis of *each particular case* pointing conclusively, or even possibly, to coffee as a pathologic irritant?

Here is what Professor Samuel C. Prescott, head of the Department of Biology and Public Health, Massachusetts Institute of Technology, says of caffeine:—

"For the great majority of normal individuals it is a mild stimulant of the heart, increases power to do muscular work, increases concentration of mental effort and therefore the power to do more brain work. It is not followed, except in excessive doses, by undesirable after-effects. Our studies lead us to entire agreement with the results stated by Hollingworth that when taken with food in moderate amount, caffeine is *not in the least deleterious*."

That case management which gives relief with the least derangement of the patient's normal habits certainly is to be preferred over that which upsets his daily routine of living. Taking coffee from the breakfast of the vast majority of patients is adding hardship to illness.

Is it necessary? In how few cases is it really necessary? Turn to any work on dietetics.

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FOREIGN CORRESPONDENCE

THE BRITISH NATIONAL PROVIDENT SCHEME FOR HOSPITAL AND MEDICAL SERVICES

BY OUR LONDON CORRESPONDENT

THE rich and poor in this country are well served so far as medical attendance and care are concerned; the rich because they can afford to pay for such services and the poor because it is provided for them either gratis or at a cost well within their means. The hospitals, in which the most skillful surgical and medical aid possible is procurable, are open to the poor, and for the rich there are splendidly equipped and excellently managed nursing homes. But the middle classes, and especially those termed the lower middle classes, have no facilities of this kind and if serious illness attacks or if an accident happens to any member thereof, he or she must perforce be treated and nursed at their own homes, which are lacking in most of the essentials which make for recovery, and they are denied the assistance of the most expert medical attendance and nursing. Moreover, even the voluntary hospitals, for the most part, have been compelled to charge for their services; at any rate, a great many of these institutions ask all their patients to contribute according to their means to the outgoing cost of their maintenance and treatment.

Thus it is plainly evident that the great and increasing cost and complexity of medical services, over and above the attendance of a general practitioner have made it impossible for a large majority of the population to obtain full advantage of the progress of medicine, although it is obvious that many cases cannot be properly dealt with unless the doctor in charge has all modern facilities at his disposal.

Some little time ago Dr. J. F. Gordon Dill, physician to the Sussex General Hospital, Brighton, conceived and carried into execution at that institution a scheme whereby the individual of limited means should be able to obtain for himself and family the advantages of the best medical treatment and care and the most efficient nursing. The plan proved successful at Brighton and has now been extended to London by the help of the London Hospital, the largest hospital in Great Britain, situated in the heart of the most poverty-stricken district of the metropolis; St. Thomas' Hospital of 600 beds or so; and the Royal Free Hospital with 200 beds or thereabouts. The scheme is a provident one, the object of which is to supply its members free of cost, beyond their subscriptions as members, with practically all the highest resources of medicine which are available. It should be clearly understood, however, that this scheme has nothing whatever to do

with the National Health Insurance or any other organization for medical benefit and does not provide its members with ordinary medical attendance, that is, attendance by the general practitioner or other benefit to which they are entitled from the state or local authorities or under the National Health Insurance Acts. It is for the benefit of those who, irrespective of class or occupation, are in a financial position which makes them eligible for election as members. Persons insured under the National Health Insurance Acts are eligible for election as members of the scheme without regard to income; but in the case of all persons not so insured limits of income to qualify for admission are as follows:

	Limit of income	Annual subscription
1. (a) Single person over 16 years of age.....	£250	£1
(b) Widow or widower without children under 15 years of age or other dependents.....		
2. (a) Married couples without children under 16 years of age.....	£400	£1 10
(b) Single person with one dependent.....		
(c) Widow or widower with one child under 16 years of age or with one dependent.....		
3. (a) Married couples with a child or children under 16 years of age or other dependents.....	£500	£2
(b) Single person with more than one dependent.....		
(c) Widow or widower with more than one child under 16 years of age, or other dependents.....		

Facilities for Treatment

Except where otherwise stated, members will receive without charge beyond their subscriptions to the scheme the following advantages:

Consultations. The medical attendant of a member may arrange, by appointment, for individual consultations at any of the cooperating hospitals, and such treatment as he and the consultant may jointly think advisable will be undertaken at the hospital if this should be necessary. For those members who are unable to leave their beds and who reside within a radius of four miles of Charing Cross (near Trafalgar Square) and the center of metropolitan London, the services of visiting consultants may be secured by appointment. For members outside this area, but within the metropolitan police area, who are unable to leave their beds, free consultations may be obtained by appointment, subject to the payment to the consultant at the time of consultation of a charge of ten shillings and sixpence per mile (equal to one-half of the usual mileage rates) beyond the four mile radius.



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never fades—neither does it crack, chip or peel. It is an oil base, waterproof enamel finish that comes in sixteen different colors. We recommend specially for hospitals our No. 347 Ivory or No. 340 Buff or No. 327 Cream as giving the most satisfaction in appearance and wear. Send for specimen color sheets.

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When using advertisements see Classified Index, also refer to YEAR BOOK.

Nursing. The services of the "Queen's" and other visiting nurses will be available within the boundaries of the City of London and the metropolitan police areas for members at their own homes at the request of their medical attendants.

Dental Services. (a) Treatment in hospital. Such dental treatment as may be considered necessary for a member while under medical or surgical care in a co-operating hospital. (b) Consultations. The dental surgeon in attendance upon a member may arrange by appointment for consultations at the dental department of any of the cooperating hospitals.

Laboratory. All the resources of the pathological laboratories of the cooperating hospitals will be available for the benefit of members after consultation, including bacteriological and pathological investigations and examinations beyond the province of general practice, such as Wassermann and Widal tests, blood examinations and counts, the preparation of autogenous vaccines, etc.

X-rays. Examinations will be available where found necessary after consultation and a report will be supplied to the medical attendant of a member. Treatment by x-rays will be given when, after consultation, it has been considered advisable.

Massage. Massage will be provided by appointment for members in whose cases it is prescribed after consultation.

Electrical treatment. Galvanism, faradism, high frequency, ionization, diathermy, etc., will be administered by appointment, after consultation, in suitable cases.

Hospital treatment. Urgent cases will be admitted to hospitals as at present; other cases requiring operation or other hospital treatment will after consultation be admitted to hospital in due course, but a member will not take precedence over more urgent cases and the ordinary hospital routine will not be disturbed.

Radium treatment. If, as the result of a consultation in accordance with the regulations as to consultations aforementioned, it is decided that treatment by radium is necessary in the case of a member, such treatment will be provided by arrangement with the Radium Institute.

Ambulances. These will be available at the request of the medical attendant or of the secretary of a cooperating hospital for the transport of stretcher cases within the boundaries of the city and the metropolitan police areas.

The above are the broad outlines of the scheme which will, it is hoped, meet the medical and nursing needs of classes who up to the present time have not been able to obtain the most efficient medical, surgical and nursing services. It is encouraging to know that the scheme is likely to undergo great developments, even in the near future, and in the next letter it is probable that the writer will be in a position to deal with some of these developments.

The organizing and executive committee of this scheme are as follows: The Hon. Sir Arthur Stanley, G.B.E., C.B., M.V.O.; Lord Dawson, G.C.V.O., K.C.M.G., C.B., M.D., F.R.C.P.; Sir Alan G. Anderson, K.B.E.; W. McAdam Eccles, M.S., F.R.C.S.; J. E. Gordon Dill, O.B.E., M.D., Hon. Secretary.

THE RECONSTRUCTION OF THE BRITISH HOSPITAL SYSTEM*

By COUNCILLOR DAVID ADAMS, J.P., Newcastle, England

It is impossible for any layman to scan the long and glorious vistas of medical research of preventive and curative medicine without being stirred by a profound sense of gratitude for invaluable benefits conferred by

every branch of the medical profession upon the human family. In spite of this brilliant past, a vast field for reform is presented to the view.

Additional hospitals are indeed imperatively required. In spite of the fact that voluntary contributions are larger now than in pre-war days, in spite of insistent organized appeals for assistance the voluntary hospitals have been driven to solicit a government grant of 1,000,000 pounds of which half has been promised for this year.

Public monies however should never be available for any public purpose without at least a modicum of public control. Government grants for the purpose in question should be via the principal municipal authorities which in return must have representation upon the boards of the recipient hospitals pending that inevitable hour when the voluntary system will be absorbed in the general scheme of publicly maintained and controlled institutions. That hour will necessarily be far distant. Whilst the ultimate ideal may be a free state medical service for every citizen, considerations of finance, if no other, bar that road today. Hence the private patient and the voluntary hospital must continue.

What then should be the relationship of the medical profession to rate-aided institutions? This question is part of the larger one: What is the position of the general practitioner to a unified scheme of medical service?

Long civic experience convinces the writer that a statutory committee of the existing local authority would prove the most efficient instrument as health authority. This body would report to and be ultimately subservient to the local authority which alone would possess power to levy rates. To this body a limited number of the representatives of the medical and allied services would be co-opted. These would necessarily be in a minority but with full power to initiate measures and to vote.

The proposal to set up in each local health area a local advisory council (contrary to the opinions of the Society of Medical Officers of Health) would, I am convinced, be of paramount value to the country. Through the cordial efforts of the health authority and of the advisory council, preventive and curative work may be blended and co-ordinated and medical opinion concentrated upon the common task of a unified and comprehensive health service.

It will be freely conceded that under ideal conditions the actual clinical work of all hospitals should be divided up amongst the private practitioners and consultants, if these are to secure the experience they now lack. Yet there are vital obstacles to this procedure. Would the necessity for constant exercise of economy rule out the clinical staffing alone by part time persons of purely communal hospitals. The writer is convinced that it would do so.

A solution could be found in determining that in all the larger institutions a certain proportion of the clinical staff should be part time private practitioners and consultants. There would be reserved in every communal hospital a ward available for the private patients of general practitioners. Thus, the former of which there are millions in this country, would supply further facilities for the larger experience desired by private practitioners. The public would at the same time benefit by the contributions paid for the use of such institutions. Officers of the institutions should give full time to their duties.

It is fundamentally important in this great task that every scope should be given for the introduction of new methods and variety of treatment and opportunities for radical change.

*Abstracts from a paper by Councillor Adams on "The Relationship of the Medical Profession to Local Authorities in Respect to Rate-Provided Hospitals and Clinics."



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BOOK REVIEWS AND CURRENT HOSPITAL LITERATURE

BURDETT'S HOSPITALS AND CHARITIES

The Year Book of Philanthropy and Hospital Annual.
Founded by Sir Henry Burdett, K.C.B., K.C.V.O.*

With its usual comprehensiveness, Burdett's Hospitals and Charities appears in its thirty-second volume. This exhaustive record of the hospitals and charity of British, American and Colonial hospitals has in its latest edition a few additions and subtractions which work toward its greater utility. It has been brought to fairly strict timeliness by the omission of institutions which have been closed for more than two years and of those from which no information has been received in the past three years.

The index, which is a new one, contains more than 500 entries and in response to a specially expressed desire has been made to include under the head of venereal diseases a list of hospitals which have been approved as treatment centers.

Burdett's may be considered as a most reliable guide to the hospitals, asylums, medical schools and colleges, nursing and convalescent institutions, sanatoria, religious and benevolent institutions and dispensaries of Australia, Great Britain, Canada, South Africa, Egypt, India and the United States. One of its chief virtues is in the accessibility of its material.

TEXTBOOK OF SURGICAL NURSING

By Ralph Colp, A.B., M.D., Instructor in Surgery, Columbia University, New York; Lecturer in Surgical Nursing, Presbyterian Hospital Training School for Nurses, New York; Adjunct Visiting Surgeon, Volunteer Hospital, New York; Chief of Surgical Clinic, Beth Israel Hospital, New York; and by Manleva Wylie Keller, B.S. R.N., formerly Chief Operating Room Nurse, and Anesthetist, St. Luke's Hospital, New York; and former staff member of Mobile Hospital No. 2, A. E. F., France.¹

Of writing books for nurses there seems to be no end, but occasionally one is written that is so much above the average that it at once becomes outstanding. The new "Textbook on Surgical Nursing," by Colp and Keller promises to be of this type. It is an interesting example of the kind of team work in book-making that is so important in modern surgery.

The authors have stated that their aim is "to present as accurately and as simply as possible the actual detailed nursing of the various conditions related to things surgical." A study of the book indicates that this aim has been accomplished. The descriptions are brief, simple, and free from the mass of repetition that makes many books cumbersome.

Unusually good illustrations help to reinforce the text

and add to its value. The chapter on surgical dietetics is based on diet lists that are used in the Presbyterian Hospital, New York, and this chapter alone covers subject matter that is invaluable in the work of actual nursing.

A very complete index makes it easy to secure sought-for information readily. It is refreshing to note the statement that a surgical nurse "must live up to that high social calling by being well prepared; she must be so educated and trained that she will not be a mere automatic tool, but an intelligent, enthusiastic co-worker, filled with a zeal for science, and giving her whole mind and heart to the work that is before her—for only recently in the history of surgery is there scientific surgical nursing. The surgical nurse is a pioneer; the trail has been blazed; but it is still a new one, and she must show what she can do."

TEXTBOOK OF MATERIA MEDICA FOR NURSES

Compiled by Lavinia L. Dock, Graduate of Bellevue Training School for Nurses. Seventh Edition, Revised in accordance with the ninth decennial revision of the U. S. Pharmacopoeia.¹

The seventh edition of this well known text-book comes to us as an old friend, retaining all the good features that so many students have found helpful, and introducing much new and interesting material which is in accordance with the ninth decennial revision of the Pharmacopoeia of the U. S. A.

The classification of drugs is in accordance with their effect on the various systems of the body, which makes for convenience in class teaching and facilitates correlation of subject matter with that of other classes such as anatomy and physiology, medical nursing, etc. Such correlation stimulates the association of ideas and reinforces all efforts to memorize.

The text has been simplified and abbreviated, which is in line with the present tendency to minimize the use of drugs and rely to an increasing extent on other therapeutic agencies. A very complete index adds to the value of the book.

Only those who know from actual experience how hard it was to cull from exhaustive texts the limited knowledge of materia medica that nurses require can understand how great was the need met by this first "Text-book of Materia Medica for Nurses." Successive revisions have kept it ever in the lead and the name of the author—Lavinia L. Dock—insures it continued leadership and the high regard of the great army of nurses who are proud that she is one of them.

*London, The Scientific Press, Limited, 1921.
1. The Macmillan Company, New York, 1921.

1. G. P. Putnam's Sons, New York and London, The Knickerbocker Press.